

Release 2.1D John F. Collins, Biocomputing Research Unit.
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MSPrch_mn n.a. - n.a. database search, using Smith-Waterman algorithm
Run on: Wed Sep 24 00:03:09 1997; MasPar time 70.34 Seconds
Tabular output not generated. 805,901 Million cell updates/sec
Title: >US-08-409-122-1
Description: (1-1524) from US08409122.seq
Perfect Score: 1524
N.A. Sequence: 1 ATGGCTTGTGGCGGCTAG.....GTGTACGTGCGAAGTA 1524
Comp: TACCGAAGACCGCGCGATC.....CACATGACAGGTCTTCATT

Scoring table: TABLE default
Gap 6
Nmatch STD : Dbase 0; Query 0
Searched: 71537 seqs, 18598907 bases x 2
Post-processing: Minimum Match 08
Listing first 45 summaries

Database: n-issued
1:51 2:52 3:53 4:54 5:55 6:56 7:PCR90 8:PCR91 9:PCR92
10:PCR93 11:PCR94 12:PCR95 13:PCR96
Statistics: Mean 8.815; Variance 4.372; scale 2.016
Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description	Pred. No.
1	721	47.3	7833	6	US-08-074-	Sequence 9, Applicatio	0.00e+00
2	524	34.4	1517	4	US-08-032-	Sequence 1, Applicatio	0.00e+00
3	504	33.1	1517	4	US-08-032-	Sequence 2, Applicatio	0.00e+00
4	419	27.5	8010	12	PCR-US95-1	Sequence 2, Applicatio	0.00e+00
5	309	20.3	467	6	US-08-457-	Sequence 288, Applicat	1.59e-233
6	309	20.3	467	5	US-08-474-	Sequence 288, Applicat	1.59e-233
7	274	18.0	415	6	US-08-457-	Sequence 20, Applicati	9.41e-204
8	274	18.0	415	5	US-08-474-	Sequence 20, Applicati	9.41e-204
9	251	16.5	455	5	US-08-474-	Sequence 14, Applicati	2.99e-184
10	251	16.5	455	6	US-08-457-	Sequence 14, Applicati	2.99e-184
11	251	16.5	467	6	US-08-457-	Sequence 283, Applicat	2.99e-184
12	251	16.5	467	5	US-08-474-	Sequence 283, Applicat	2.99e-184
13	241	15.8	467	6	US-08-457-	Sequence 283, Applicat	8.64e-176
14	241	15.8	467	5	US-08-474-	Sequence 283, Applicat	8.64e-176
15	224	14.7	464	6	US-08-474-	Sequence 296, Applicat	1.95e-161
16	224	14.7	464	5	US-08-457-	Sequence 296, Applicat	1.95e-161
17	192	12.6	455	6	US-08-457-	Sequence 293, Applicat	1.55e-134
18	192	12.6	455	5	US-08-474-	Sequence 293, Applicat	1.55e-134
19	150	12.5	464	5	US-08-474-	Sequence 284, Applicat	7.34e-133

20	190	12.5	464	5	US-08-457-	Sequence 284, Applicat	7.34e-133
21	185	12.1	458	5	US-08-474-	Sequence 17, Applicati	1.12e-128
22	185	12.1	458	6	US-08-457-	Sequence 17, Applicati	1.12e-128
23	181	11.9	467	5	US-08-474-	Sequence 286, Applicat	2.48e-125
24	181	11.9	467	6	US-08-457-	Sequence 286, Applicat	2.48e-125
25	179	11.7	467	6	US-08-457-	Sequence 276, Applicat	1.16e-123
26	179	11.7	467	5	US-08-474-	Sequence 276, Applicat	1.16e-123
27	177	11.6	464	6	US-08-457-	Sequence 292, Applicat	5.42e-122
28	177	11.6	464	5	US-08-474-	Sequence 292, Applicat	5.42e-122
29	172	11.3	452	6	US-08-474-	Sequence 18, Applicati	8.02e-118
30	172	11.3	452	5	US-08-457-	Sequence 18, Applicati	8.02e-118
31	169	11.1	467	6	US-08-457-	Sequence 273, Applicat	2.53e-115
32	169	11.1	467	5	US-08-474-	Sequence 273, Applicat	2.53e-115
33	157	10.3	450	5	US-08-474-	Sequence 15, Applicati	2.38e-105
34	157	10.3	450	6	US-08-457-	Sequence 15, Applicati	2.38e-105
35	157	10.3	461	6	US-08-474-	Sequence 287, Applicat	2.38e-105
36	157	10.3	461	5	US-08-457-	Sequence 287, Applicat	2.38e-105
37	156	10.2	467	6	US-08-474-	Sequence 275, Applicat	1.60e-104
38	156	10.2	467	5	US-08-457-	Sequence 275, Applicat	1.60e-104
39	150	9.8	394	5	US-08-474-	Sequence 279, Applicat	1.49e-99
40	150	9.8	394	6	US-08-457-	Sequence 279, Applicat	1.49e-99
41	149	9.8	449	5	US-08-474-	Sequence 289, Applicat	1.00e-98
42	149	9.8	449	6	US-08-457-	Sequence 289, Applicat	1.00e-98
43	147	9.6	461	6	US-08-457-	Sequence 278, Applicat	4.51e-97
44	147	9.6	461	5	US-08-474-	Sequence 278, Applicat	4.51e-97
45	145	9.5	450	5	US-08-474-	Sequence 16, Applicati	2.03e-95

ALIGNMENTS

RESULT 1
ID US-08-074-879-9 STANDARD; DNA; UNC; 7833 BP.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 9, Application US/08074879.
CC Sequence 9, Application US/08074879.
CC Patient No. 5656423
CC GENERAL INFORMATION:
CC APPLICANT: Orth, Gerard
CC APPLICANT: Volpers, Christoph
CC APPLICANT: Streek, Rolf
CC TITLE OF INVENTION: DNA Sequences Derived from the Genome of
CC TITLE OF INVENTION: the Papillomavirus HPV39, Their Use In In Vitro Di
CC agnos
CC TITLE OF INVENTION: and for the Production of an Immunogenic Compositi
CC on
CC NUMBER OF SEQUENCES: 11
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
CC ADDRESSSEE: Dunner
CC STREET: 1300 I Street, N.W.
CC CITY: Washington
CC STATE: DC
CC COUNTRY: USA
CC ZIP: 20005-3315
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC Compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/074, 879
CC FILING DATE: 16-JUN-1993
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: WO 92/1136
CC FILING DATE: 09-JUL-1992
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Potter, Jane E.R.
CC REGISTRATION NUMBER: 33,332
CC REFERENCE/DOCKET NUMBER: 02356, 0066-00000
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-408-4000

	COUNTRY:	USA
	ZIP:	92660
CC	COMPUTER READABLE FORM:	
CC	MEDIUM TYPE:	Floppy disk
CC	OPERATING SYSTEM:	IBM PC compatible
CC	SOFTWARE:	PC-DOS/MS-DOS
CC	CURRENT APPLICATION DATA:	Patent Release #1.0, Version #1.25
CC	APPLICATION NUMBER:	US/08/032,869A
CC	FILING DATE:	16-MAR-1993
CC	CLASSIFICATION:	435
CC	PRIOR APPLICATION DATA:	
CC	APPLICATION NUMBER:	US 07/941,371
CC	FILING DATE:	03-SEP-1992
CC	ATTORNEY/AGENT INFORMATION:	
CC	NAME:	KIRKPATRICK Ph.D., Anita M.
CC	REGISTRATION NUMBER:	32,617
CC	REFERENCE/DOCKET NUMBER:	NTH032_001CPI
CC	TELECOMMUNICATION INFORMATION:	
CC	TELEPHONE:	619-235-8550
CC	TELEFAX:	619-235-0176
CC	INFORMATION FOR SEQ ID NO:	2
CC	SEQUENCE CHARACTERISTICS:	
CC	LENGTH:	1517 base pairs
CC	TYPE:	nucleic acid
CC	STRANDEDNESS:	singie
CC	TOPOLOGY:	linear
CC	MOLECULE TYPE:	DNA (genomic)
CC	HYPOTHETICAL:	NO
CC	ANTI-SENSE:	NO
CC	FEATURE:	
CC	NAME/KEY:	CDS
CC	LOCATION:	1..1517
SQ	Sequence	1517 bp; 487 A; 291 C; 286 G; 453 T; 0 other;
	Query Match	33.1% Score 504; DB 4; Length 1517;
	Best Local Similarity	68.2%; Pred No. 0,00e+00;
	Matches	972; Conservative 0; Mismatches 450; Indels 3; Gaps 2;
Db	1 ATGTCCTTGGCGCTCCCTAGTAGAGGCCACTCTCACTACGTGCCTGCCCCAGATATCTAG	60
Qy	1 ATGGCTTTGGCGGCCCTAGAGCAATACCGTAATCTTCACCTCTCTGCGCAGA	60
Db	61 GTTGTAAGCACGGATGAATATTGTCGACGACAACATATATATCATGACGAAATCC	120
Qy	61 GTTGTAAATACGAGATTAATGATGTGCACACAGCATATTTATATCATGCTGGACCTT	120
Db	121 AGACTACTGCGAGTTGCACATCCCTATTTTCTTATAAAAACTTACACATACAAAATA	180
Qy	121 AGATTATTAACGTGGTGTGATATCATATTTTAAAGGCTCTCGACAGGTGTGCATATAGCAG	180
Db	181 TTATCTTCTAAGATACAGATATTAACATACAGGGTATTTAGAAATACATTTACCTGACCCC	240
Qy	181 GAATTTCTTAAGATTCTTGCATACCAATATNAGATTTTGGGTGAGATTACCTGACCCA	240
Db	241 AATAAGTTGGTTTTCTCGAACACCTCATTTTATATCCAGATACACAGCGGCTGGTTGG	300
Qy	241 AATAAATTGGTTTACCTGATTAAGATATTTATATCTGAACAACAAGCTTTAGTGTAG	300
Db	301 GCCGTGTAGAGTTGGAGGTAGGTGCGGTGACGACATTAGGTGGGCAATTAAGGCCAT	360
Qy	301 GCCGTGCTCGTAGATGGAATATGGCGCGGTGACGCTTTAGGTGTGGCTTAAGGGGCAT	360
Db	361 CCTTATTAATAATTTGGATGACACAGAAATGCTAGTCTTATGACGAAATGACAGGT	420
Qy	361 CCATTTTATATATATATGATGACACCTGAAATGTTCCATGCGCTCAATGTTTCT	420
Db	421 GTGATTAATAGAGATGTATATCTAATGATTACAAACAAACAATTGGTTTAATGGT	480
Qy	421 TGAGGACGTATGGGACAAATGTCTGTATGATTAATAGCAGACAGATTAATTTTGGGC	480
Db	481 TGCAAACCACTTATAGGGAACTAGGGGCAAGAGATCCCATGTACCAATGTTGCAGTA	540

Oy	481	TAIGCCCTGCTATTGGGGAACACACGGGCTTAAGGACAGCGTGTAAATACGGCTCTTTA	540
Db	541	AATCCAGGTGATTTCCACATATAGATTAATAACAGTTATTCAGATGGTGATATG	600
Oy	541	TCACAGGGCATATGCCCTTTNAGACTTAAACAACAGTTTGGAAATGTGATATG	600
Db	601	GTTGATACAGCTTGGTGTCTATGACATTTTACATCTTACAGGCTAAACAAAGTAA	660
Oy	601	GTAGATCTGGGATATGGGCAACAGACTTTGATCATCTCAAGATACATAATGTAGCTA	660
Db	661	CCACTGATATTTGTACATCTATTTCACAATATCCAGATATATATTAAATGGGTGCA	720
Oy	661	CCATTGGATTTTGTCACTATTTGTATAATATCCGATTATTTACAAATGTCTGMA	720
Db	721	CCATATGGCAGCAAGCTTATTTTTTATTACGAAGGAACAAATGTTGTTAGACATTTA	780
Oy	721	CCATATGGGATTCATCTTTTTTTCCTTACAGACGTAGACACCTTTTGGTAGGCATTTT	780
Db	781	TTTATATGGGCTGTACTGTGTGTGAATCTACCAAGACATTTATACATTAAGGCTCT	840
Oy	781	TGGAATATGGCAGATCTATATGGGACACTGTGCCATCATCTTATATATATAAGGCA	840
Db	841	GGGTACTGTCAAAATTATGGCAGTCAAAATTTATTTTCACACCTAGTGGTCTATGGT	900
Oy	841	GGATATGGTCTTACACGTGGACGTGTGTATTTCTCCCTCTCCAAATGGCTCTATGTT	900
Db	901	ACCTGTATGGCCAAATTTATTAATTAACCTTATTTGGTTCAACGACGACGGCACAT	960
Oy	901	ACCTGTACATCCAGTGTATTAAATTAACATATTTGGTATCATTAAGCCAGGCTATAC	960
Db	961	AATGCACTTTGTGGGTACCAACATTTTGTATCTGTGTGATACATACGACAGTACA	1020
Oy	961	AATGGATCTGTGGCATATATCATTTTGTATCTGTGTAGATACCACTGCTATGAC	1020
Db	1021	AATATGTATTATGTGTGCTCCATATCTACTTACAAACATTA-CA-TATAAATCTAAC	1077
Oy	1021	AATTTTACAAATATGTCTTCTTACACAGTCTCTGTACCTTGGCCATATGATGTCOAAA	1080
Db	1078	TTTAAAGAGTACCTACGACATGGGGAATATGATTTTACAGTTATTTTTCACACGTGG	1137
Oy	1081	TTTAAAGCATATAGCAGACATATGTAAGAAATATGATTTGCAAGTATTTTTCAGTATG	1140
Db	1138	AAATATACCTTAACTGCACAGCGTATATGACATACATTTCTATGATTTCCACTATTTG	1197
Oy	1141	ACTATACTTTAACTGCACATATGTTATGTCTTATATATGTTATGTAAGAGCATTTTA	1200
Db	1198	GATGACTGGAATTTTGTCTAACACCTCCGCCAGGAGGACACTAGAAATACTTATAGG	1257
Oy	1201	GAGGATTTGGAATTTGTGTTCCTCCGCCGCACTACTAGTTGTGTGATATATATGCT	1260
Db	1268	TTTGTACCCAGCAATATCTGTCTCAAAAACATATACCTCTCAGCAGCTTAAGAAATGAT	1317
Oy	1261	TTTGTACATGTGTGCTATTTACCTGTCAAAAAGATGTGTCAACAGCTGAAAAATTAAG	1320
Db	1318	CCCTTAAAAATATACCTTTTGGGAGTAAATTTTAAAGAAATGTTTCTGTGACACTA	1377
Oy	1321	CCCTATGATATGTTAAAGTTTGGATGTGATTTAAAGAAAGTTTCTTGTGGACTTA	1380
Db	1378	GATCACTTCTCTTGAAGCAGCAAAATTTTACATCAAGACAGATGT 1422	
Oy	1381	GATCATATCCCTTGGAGCTAAATTTTGTGTCAAGGTGTGATTTG 1425	
RESULT	4		
ID	PCT-US95-11859-2 STANDARD; DNM: UNC: 8010 BP.		
AC	xxxxxx		
DT	01-JAN-1900		
DE	Sequence 2, Application PC/TUS9511859.		
CC	Sequence 2, Application PC/TUS9511859		
CC	GENERAL INFORMATION:		
CC	APPLICANT: JANSEN, KATHRIN U.		
CC	APPLICANT: HOFMANN, KATHRIN J.		
CC	TITLE OF INVENTION: DNA ENCODING HUMAN PAPILLOMA VIRUS TYPE		

T-US95-11859-2 STANDARD. DNA. UNC. 8010 BP.
 -JAN-1900
 -XXXX
 sequence 2, Application PC/TUS6511859.
 sequence 2, Application PC/TUS95311859
 GENERAL INFORMATION:
 APPLICANT: JANSSEN, KATHRIN U.
 APPLICANT: HOFMANN, KATHRIN U.
 TITLE OF INVENTION: DNA ENCODING HUMAN PAPILLOMA VIRUS TYPE

D	COUNTRY:	USA
CC	ZIP:	92660
CC	COMPUTER READABLE FORM:	
CC	MEDIUM TYPE:	Floppy disk
CC	COMPUTER:	IBM PC compatible
CC	OPERATING SYSTEM:	PC-DOS/MS-DOS
CC	SOFTWARE:	PatentIn Release #1.0, Version #1.25
CC	CURRENT APPLICATION DATA:	
CC	APPLICATION NUMBER:	US/08/032,869A
CC	FILING DATE:	16-MAR-1993
CC	CLASSIFICATION:	435
CC	PRIOR APPLICATION DATA:	
CC	APPLICATION NUMBER:	US 07/941,371
CC	FILING DATE:	03-SEP-1992
CC	ATTORNEY/AGENT INFORMATION:	
CC	NAME:	Kiripatrick Ph.D., Anita M.
CC	REGISTRATION NUMBER:	32,617
CC	REFERENCE/DOCKET NUMBER:	NTH032.001CPL
CC	TELECOMMUNICATION INFORMATION:	
CC	TELEPHONE:	619-235-8550
CC	TELEFAX:	619-235-0176
CC	INFORMATION FOR SEQ ID NO. 2:	
CC	SEQUENCE CHARACTERISTICS:	
CC	LENGTH:	1517 base pairs
CC	TYPE:	nucleic acid
CC	STRANDEDNESS:	single
CC	TOPOLOGY:	linear
CC	MOLECULE TYPE:	DNA (genomic)
CC	HYPOTHETICAL:	NO
CC	ANTI-SENSE:	NO
CC	FEATURE:	
CC	NAME/KEY:	CDS
CC	LOCATION:	1..1517
SQ	Sequence	1517 BP; 487 A; 291 C; 286 G; 453 T; 0 other;
D	Best Match	33.1%; Score 504; DB 4; Length 1517;
D	Query Local Similarity	68.2%; Freq. No. 0.00e+00;
D	Matches	972; Conservative 0; Mismatches 450; Indels 3; Gaps 2.
D	1	ATGCTCTTGGCTGCCCTAGTAGAGGCCACTGTCTACTTGCTCTCTGTCGCCAGTATTAAAG 60
OY	1	ATGGCTTTGTGGCGGCCTAGTAGACAAATACCAGTAATCACTTCCACCTCTCTGGCGAMBA 60
D	61	GTTGTAGAAGCAGGATGAATAATGTGGCAGCAGCAAACATATATATCATGACAGACATCC 120
OY	61	GTTGTAAATACGAGATATATGTGACTGCACAAGCATATTTATATCATGCTGGACCTCT 120
D	121	AGACTACTTGCAGTTGACATATCCCTATTTTCCCTATTTAAAAAACCTAACATATACAAATA 180
OY	121	AGATATATTAACGTGGTGATATCATATTTTTAGGGTCTCTGACAGGTGGTGCAATTAAGCA 180
D	181	TTAATTCCTAAAGTATACAGATTATACAAATACAGGGTATTATGAATACATTTACCTGACCCC 240
OY	181	GATATTCCTAAAGTATTCGCTATCACAAATATBAGATATTTGGGTGCAATTCCTGACCCA 240
D	241	AATAGATTTGGTGTTCCTCGACACCTCATTTTAAATCCAGATACACAGCGGCTGGTTTG 300
OY	241	AATAAATTTGGTGTTCCTCGAATATAGTATTTATATCTCTGAAAACAACAGTTTATGTGTG 300
D	301	GCGGTGTAGAGGTGAGGTAGGTGCGGTGCGGTGACAGCCATTAGGTGTGGGCAATTAGTGCCAT 360
OY	301	GCGTGTCTGTAGATGAATGATGGCCGTGGTCAAGCTTTAGGTGTGGCTTAGTGGGCAT 360
D	361	CCTTATTAATTAATTTAGTATGACACAGAAATGCTAGTCTTATGACAGCAATATGACGT 420
OY	361	CAATTTATATTAATTTAGTATGACACAGAAATGCTTCCATGCCCTACGCTAAATGTTCT 420
D	421	GAGGTATATAGAAATGTATATTCATGATATCAAAACAACAACAAATGTGTTTATTTGCT 480
OY	421	GAGGACGCTTAGGGAACAATGTGTGTATATTAAGCAGACACAGTTATGATTTTGGGC 480
D	481	TSCAAACACCTTAGGGGAACACTGGGGCAAGAAGATCCCCATGTACCAATGTTGCAAGT 540

Oy	481	TAIGCCCTGCTATTGGGGAACACACGGGCTTAAGGACAGCGTGTAAATACGGCTCTTTA	540
Db	541	AATCCAGGTGATTTCCACATATAGATTAATAACAGTTATTCAGATGGTGATATG	600
Oy	541	TCACAGGGCATATGCCCTTTNAGACTTAAACAACAGTTTGGAAATGTGATATG	600
Db	601	GTTGATACAGCTTGGTGTCTATGACATTTTACATCTTACAGGCTAAACAAAGTAA	660
Oy	601	GTAGATCTGGGATATGGGCAACAGACTTTGATCATCTCAAGATACATAATGTAGCTA	660
Db	661	CCACTGATATTTGTACATCTATTTCACAATATCCAGATATATATTAAATGGGTGCA	720
Oy	661	CCATTGGATTTTGTCACTATTTGTATAATATCCGATTATTTACAAATGTCTGMA	720
Db	721	CCATATGGCAGCAAGCTTATTTTTTATTACGAAGGAACAAATGTTGTTAGACATTTA	780
Oy	721	CCATATGGGATTCATCTTTTTTTCCTTACAGACGTAGACACCTTTTGGTAGGCATTTT	780
Db	781	TTTATATGGGCTGTACTGTGTGTGAATCTACCAAGACATTTATACATTAAGGCTCT	840
Oy	781	TGGAATATGGCAGATCTATATGGGACACTGTGCCATCATCTTATATATATAAGGCA	840
Db	841	GGGTACTGTCAAAATTATGGCAGTCAAAATTTATTTTCTACACAGCTAGTGGTCTAT	900
Oy	841	GGATATGGTCTTACACGTGGAGCTGTGTATTTCTCCCTCTCCAAATGGCTCTATATT	900
Db	901	ACCTGTATGCCCAATTTATTAATTAACCTTATTTGGTTCAACGACGACGGGCACAT	960
Oy	901	ACCTGTACATCCAGTGTATTAAATTAACCATATTTGGTATCATTAAGCCAGGCTATAC	960
Db	961	AATGCACTTTGTGGGTACCAACTATTTGTATCTGTGTGATACATACGACAGTACA	1020
Oy	961	AATGGATCTGTGGCATATATCATTTTGTATCTGTGTAGATACCACTGCTATGAC	1020
Db	1021	AATATGTATTATGTGTGCCATATCTACTTACAAACATTA-CA-TATAAATCTTAC	1077
Oy	1021	AATTTTACAAATATGTCTTCTTACACAGTCTCTGTACTTGGCCATATGATGTCACAA	1080
Db	1078	TTTAAAGAGTACCTACGACATGGGGAATATGATTTTACAGTTATTTTTCACACGTGC	1137
Oy	1081	TTTAAAGCAATATGACAGATATGTAAGAAATATGATTTGCAAGTATTTTTCAGTATGT	1140
Db	1138	AAATATACCTTAACTGCACAGCGTATATGACATACATTTCTATGATTTCCACTATTTG	1197
Oy	1141	ACATATCTTAACTGACAAATGATATGTCTCTATATATGATATGATAAGAGATTTTA	1200
Db	1198	GATGACTGGAATTTTGTCTAACACCTCCGCCAGGAGGACACTAGAAATACTTATAG	1257
Oy	1201	GAGGATTTGGAATTTGTGTCTCCGCCGCCACACTACTAGTTGTGTGATATATGTCT	1260
Db	1268	TTTGTACCCAGCAATATCTGTCTCAAAAACATATACCTCTCAGCACTTAAGAAATGAT	1317
Oy	1261	TTTGTACATGTGTGCTATTTACCTGTCAAAAAGATGTGTCAACAGCTGAAAAATTA	1320
Db	1318	CCCTTAAAAATATACCTTTTGGGAGTAAATTTTAAAGAAATGTTTCTGTGACACTA	1377
Oy	1321	CCCTATGATATGTTAAAGTTTGGATGTGATTTAAAGAAAGTTTCTTGTGACACTA	1380
Db	1378	GATCACTTCTCTTGAAGCAAAATTTTACATCAAGACAGATTTG 1422	
Oy	1381	GATCATATCCCTTGGAGCTAAATTTTGTGTCAAGGTGTGATTTG 1425	
RESULT	4		
ID	PCT-US95-11859-2 STANDARD; DNM: UNC: 8010 BP.		
AC	xxxxxx		
DT	01-JAN-1900		
DE	Sequence 2, Application PC/TUS9511859.		
CC	Sequence 2, Application PC/TUS9511859		
CC	GENERAL INFORMATION:		
CC	APPLICANT: JANSEN, KATHRIN U.		
CC	APPLICANT: HOFMANN, KATHRIN J.		
CC	TITLE OF INVENTION: DNA ENCODING HUMAN PAPILLOMA VIRUS TYPE		

T-US95-11859-2 STANDARD. DNA. UNC. 8010 BP.
 -JAN-1900
 -XXXX
 sequence 2, Application PC/TUS6511859.
 sequence 2, Application PC/TUS95311859
 GENERAL INFORMATION:
 APPLICANT: JANSSEN, KATHRIN U.
 APPLICANT: HOFMANN, KATHRIN U.
 TITLE OF INVENTION: DNA ENCODING HUMAN PAPILLOMA VIRUS TYPE

CC APPLICANT: Bauer, Heidi M.
CC APPLICANT: Gravit, Patti E.
CC APPLICANT: Greer, Catherine E.
CC APPLICANT: Imprial, Chaka C.
CC APPLICANT: Manos, M. Michele
CC APPLICANT: Resnick, Robert M.
CC TITLE OF INVENTION: Detection of Human Papillomavirus by the
CC TITLE OF INVENTION: Polymerase Chain Reaction
CC NUMBER OF SEQUENCES: 298
CC CORRESPONDENCE ADDRESSES:
CC ADDRESSEE: Hoffmann-La Roche Inc.
CC STREET: 340 Kingsland Street
CC CITY: Nutley
CC STATE: New Jersey
CC COUNTRY: U.S.A.
CC ZIP: 07110
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/457,648
CC FILING DATE:
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Petry, Douglas A.
CC REGISTRATION NUMBER: 35,321
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (510) 814-2974
CC TELEFAX: (510) 814-2977
CC INFORMATION FOR SEQ ID NO: 288:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 467 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC Sequence 467 bp; 140 A; 84 C; 91 G; 152 T; 0 other;
SQ
Query Match 20.3%; Score 309; DB 6; Length 467;
Best Local Similarity 84.0%; Pred. No. 1.59e-233;
Matches 382; Conservative 0; Mismatches 73; Indels 0; Gaps 0;
Db 7 GCACAGGGTCATAACATGATTTGTCATATCATGTTGTTGCTGTAGTGAC 66
Qy 946 GCACAGGGTCATAACATGATTCGTGTCATATCATGTTGTTGCTGTAGTAT 1005
Db 67 ACTACCCGAGTACTATTTAATATGTCCTACACAAATCCTGTGCCAAGTACA 126
Qy 1006 ACCACTCGTAGTACCAATTTAACAATATGCTCTACACAGTCTCCTGACTGGGCAA 1065
Db 127 TATGACCCCTACTAAGTAAAGAGTATAGACATGAGAGTATGATTTAAGATT 186
Qy 1066 TATGATGCTACCAATTTAAGAGTATAGACAGACATGTTGAAGAATATGATTGCAATT 1125
Db 187 ATTTTCAGTGTGACATTAATTTAAGTATGAGAGTATGATGATATGATGATG 246
Qy 1126 ATTTTCAGTGTGACATTAATTTAAGTATGAGAGTATGATGATATGATGATG 1185
Db 247 AATAGTATGATTTAGAAATTTGATTTGTCCTCCACACACCTATACAAATTTG 306
Qy 1186 AATAGTATGATTTAGAAATTTGATTTGTCCTCCACACACCTATACAAATTTG 1245
Db 307 GTGATACATATCGTTTGTGCAATGCTGCTGATGCTGCTGCTGCTGCTGCTGCT 366
Qy 1246 GTGATACATATCGTTTGTGCAATGCTGCTGATGCTGCTGCTGCTGCTGCTGCTGCT 1305
Db 367 CCAAGAAAGAGATCCATATGATTAATTTAATTTTGGACGTGTTGACCTTAAGGAAA 426
Qy 1306 GCTGAAATTAAGATCCCTATGATTAAGTATTAAGTTTGGATGATGATTTAAGGAAAAG 1365

Db 427 TTTTCTCGATTTGATACATATCCCTTGGAGC 461
Qy 1366 TTTTCTTGAGACTATGATCAATATCCCTTGGAGC 1400
RESULT 6
ID US-08/474-542A-288 STANDARD; DNA; UNC; 467 bp.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 288, Application US/08/474542A.
CC Sequence 288, Application US/08/474542A.
CC Patent No. 5527898
CC GENERAL INFORMATION:
CC APPLICANT: Bauer, Heidi M.
CC APPLICANT: Gravit, Patti E.
CC APPLICANT: Greer, Catherine E.
CC APPLICANT: Imprial, Chaka C.
CC APPLICANT: Manos, M. Michele
CC APPLICANT: Resnick, Robert M.
CC TITLE OF INVENTION: Detection of Human Papillomavirus by the
CC TITLE OF INVENTION: Polymerase Chain Reaction
CC NUMBER OF SEQUENCES: 298
CC CORRESPONDENCE ADDRESSES:
CC ADDRESSEE: Hoffmann-La Roche Inc.
CC STREET: 340 Kingsland street
CC CITY: Nutley
CC STATE: New Jersey
CC COUNTRY: U.S.A.
CC ZIP: 07110
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/474,542A
CC FILING DATE:
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Petry, Douglas A.
CC REGISTRATION NUMBER: 35,321
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (510) 814-2974
CC TELEFAX: (510) 814-2977
CC INFORMATION FOR SEQ ID NO: 288:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 467 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC Sequence 467 bp; 140 A; 84 C; 91 G; 152 T; 0 other;
SQ
Query Match 20.3%; Score 309; DB 5; Length 467;
Best Local Similarity 84.0%; Pred. No. 1.59e-233;
Matches 382; Conservative 0; Mismatches 73; Indels 0; Gaps 0;
Db 7 GCACAGGGTCATAACATGATTTGTCATATCATGTTGTTGCTGTAGTGAC 66
Qy 946 GCACAGGGTCATAACATGATTCGTGTCATATCATGTTGTTGCTGTAGTAT 1005
Db 67 ACTACCCGAGTACTATTTAATATGTCCTACACAAATCCTGTGCCAAGTACA 126
Qy 1006 ACCACTCGTAGTACCAATTTAACAATATGCTCTACACAGTCTCCTGACTGGGCAA 1065
Db 127 TATGACCCCTACTAAGTAAAGAGTATAGACATGAGAGTATGATTTAAGATT 186
Qy 1066 TATGATGCTACCAATTTAAGAGTATAGACAGACATGTTGAAGAATATGATTGCAATT 1125
Db 187 ATTTTCAGTGTGACATTAATTTAAGTATGAGAGTATGATGATATGATGATG 246
Qy 1126 ATTTTCAGTGTGACATTAATTTAAGTATGAGAGTATGATGATATGATGATG 1185

CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/457,648
CC FILING DATE:
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Petry, Douglas A.
CC REGISTRATION NUMBER: 35,321
CC REFERENCE/DOCKET NUMBER: 9205
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (510) 814-2974
CC TELEFAX: (510) 814-2977
CC INFORMATION FOR SEQ ID NO: 14:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 455 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC SEQUENCE 455 BP: 131 A; 88 C; 79 G; 144 T; 13 other;
SQ
Query Match 16.5%; Score 251; DB 6; Length 455;
Best Local Similarity 74.9%; Pred. No. 2,99e-184;
Matches 341; Conservative 12; Mismatches 102; Indels 0; Gaps 0;
Db 1 GCMCAGGGCATAAATGATATGTTGGCACAATCATTTGTTTAACTGTTAGAT 60
Qy 946 GCACAGGGGTCATACATGATGCTGTCATTAACCAATTTGTTGCTGGTAGAT 1005
Db 61 ACTACTCGCAGCACAATCTTCTGCTGCTTACTACTTCTCTCTCTTAATGAA 120
Qy 1006 ACCACTCGTAGACCAATTTACAAATATGCTCTTACACAGTCTCTTACTGGCAA 1065
Db 121 TACACACTCAGGTTTAAAGAAATATGCCAGATGTGCGGAATTTGATTGCAATT 180
Qy 1066 TATGATGTCACCAATTTAGACAGTATACAGATGTGAAGAAATATGATTGCAATT 1125
Db 181 AATATTCACCTGTAATTAACMTTAATACAGAGTATGCAATCTTCAATATATG 240
Qy 1126 ATTTTCACTTATGATCTATTAATCTTAACTGAGATGTTATGCTATTTCTATATATG 1185
Db 241 AATACCACTATTTGGAGATTTGATTTGCTTACACACACCTCTCTGCTATTTA 300
Qy 1186 AATAGAGATTTTGAAGATTTGGAATCTTGCTGTTCCCTCCCGCCCACTACTAGTTG 1245
Db 301 GTTGACACATACCGTTTGTCAATCTGCTGTATCTGTCAAAAGAGACACCGCAGC 360
Qy 1246 GTGAGATACATCTTTTGTACATCTGTGCTATCTGTCACCAAGAGATGTCGACCA 1305
Db 361 CGAGTTAAACAGACCTTATGACAACTAAGTTTGGACGTAAATCTTAAAGAAAG 420
Qy 1306 GCTGAAATTAAGATCCCTATGATTAAGTTTGGAAATGTGATTTAAAGGAAAG 1365
Db 421 TTTTCTGAGATCTTGATCAGTTCCTCCYTTGGACG 455
Qy 1366 TTTTCTTGAGACTTAGATCAATATCCCTTGACG 1400

CC APPLICANT: Imprialm, Chaka C.
CC APPLICANT: Manos, M. Michele
CC APPLICANT: Resnick, Robert M.
CC TITLE OF INVENTION: Detection of Human Papillomavirus by the
CC TIME OF INVENTION: Polymerase Chain Reaction
CC NUMBER OF SEQUENCES: 298
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Hoffmann-La Roche Inc.
CC STREET: 340 Kingsland Street
CC CITY: Nutley
CC STATE: New Jersey
CC COUNTRY: U.S.A.
CC ZIP: 07110
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/457,648
CC FILING DATE:
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Petry, Douglas A.
CC REGISTRATION NUMBER: 35,321
CC REFERENCE/DOCKET NUMBER: 9205
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (510) 814-2974
CC TELEFAX: (510) 814-2977
CC INFORMATION FOR SEQ ID NO: 283:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 467 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC SEQUENCE 467 BP: 141 A; 85 C; 81 G; 160 T; 0 other;
SQ
Query Match 16.5%; Score 251; DB 6; Length 467;
Best Local Similarity 77.6%; Pred. No. 2,99e-184;
Matches 353; Conservative 0; Mismatches 102; Indels 0; Gaps 0;
Db 7 GCACAGGGTCATAAATGATTTGTTGGCATAATCAATTTCTTACTGTTGAT 66
Qy 946 GCACAGGGTCATAAACATGATGCTGTCATTAATCAATTTTGTACGTGTAGAT 1005
Db 67 ACCACTCGCAGACCAATTTTACTTGTCTTACTACTGAATCAGCTGTACCAATATT 126
Qy 1006 ACCACTCGTAGACCAATTTAAACAATATGCTCTTACACAGTCTCTGTACCTGGCAA 1065
Db 127 TATGATCCATAAATTTAAGAAATATATAGCATGTTGAGGAATATGATTGCAATT 186
Qy 1066 TATGATGTCACCAATTTAAGAGATATACAGACATGTTGAAGAAATATGATTGCAATT 1125
Db 187 AATATTCAGTTGTGATCATATGCACTGATGTAATGCTCTATATCATACTATG 246
Qy 1126 ATTTTCACTTATGATCTTAACTTAAGTGAATGTAATGCTCTATATCATATGATG 1185
Db 247 AATCTGCTATTTTGAAGATTTGGAATTTGCTGCTCCCTCCACCACTGCTAGTCTT 306
Qy 1186 AATAGCAGATTTTGAAGATTTGGAATTTGCTGCTCCCTCCCACTACTAGTCTT 1245
Db 307 GTAGATACATACCGCTATCTGCAATCAGACAGCATTTACATGCAAAAGAGCCCTCA 366
Qy 1246 GTGATACATATCTTTTGTACAAATCTGTTGCTATTTACTGTCAAAAGAGCTGCACCA 1305
Db 367 CCTACTAAAAGATCCATATGATGCTTAACTTTTGAATGTAAATTTAAAGAAAG 426
Qy 1306 GCTGAAATTAAGATCCCTATGATTAAGTTTGGAAATGTGATTTAAAGGAAAG 1365
Db 427 TTTAGTTCTGAATCGATCAGTTTCCCTTGACG 461
Qy 1366 TTTTCTTGAGACTTAGATCAATATCCCTTGACG 1400

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RESULT 12
ID US-08-474-542A-283 STANDARD; DNA; UNC; 467 BP.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 283, Application US/08474542A.
CC Sequence 283, Application US/08474542A
CC Patent No. 5527898
CC GENERAL INFORMATION:
CC APPLICANT: Bauer, Heidi M.
CC APPLICANT: Gravit, Patti E.
CC APPLICANT: Greer, Catherine E.
CC APPLICANT: Imprim, Chaka C.
CC APPLICANT: Manos, M. Michele
CC APPLICANT: Resnick, Robert M.
CC TITLE OF INVENTION: Detection of Human Papillomavirus by the
CC TITLE OF INVENTION: Polymerase Chain Reaction
CC NUMBER OF SEQUENCES: 298
CC CORRESPONDENCE ADDRESS: 298
CC ADDRESSER: Hoffmann-La Roche Inc.
CC STREET: 340 Kingsland Street
CC CITY: Nutley
CC STATE: New Jersey
CC COUNTRY: U.S.A.
CC ZIP: 07110
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC OPERATING SYSTEM: IBM PC compatible
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/474,542A
CC FILING DATE:
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Pety, Douglas A.
CC REGISTRATION NUMBER: 35,321
CC REFERENCE/DOCKET NUMBER: 9234
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (510) 814-2974
CC TELEFAX: (510) 814-2977
CC INFORMATION FOR SEQ ID NO: 283:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 467 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC Sequence 467 BP; 141 A; 85 C; 81 G; 160 T; 0 other;
SQ
Query Match 15.5%; Score 251; DB 5; Length 467;
Best Local Similarity 77.6%; Pred. No. 2,99e-184;
Matches 353; Conservative 0; Mismatches 102; Indels 0; Gaps 0;
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QY 1186 AATAGCAATATTTAGAGATTGGAACCTTGGTGTCCCGCCCGCCCACTACTAGTTG 1245
DB 307 GTAGATACATACCGCTATCTGCATACAGACGACATTTACATGTCACAAAAGACGCCCTGCA 366
QY 1246 GTGAGTACATATCGCTTTGTGTACAACTGTGTGCTATCTGTCACAAAAGATGCTGACCA 1305
DB 367 CCTACTAAAAGATCCATATGATGCTTAACTTTGGATGTAAATTTAAAGAAAAG 426
QY 1306 GCTGAATAATAGATCCCTATGATGATTAAGTTTGAATGTGATTTAAAGAAAG 1365
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QY 1366 TTTCTTTGGACTTATGATCATATCCCTTGAGC 1400

RESULT 13
ID US-08-457-648-285 STANDARD; DNA; UNC; 467 BP.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 285, Application US/08457648.
CC Sequence 285, Application US/08457648
CC Patent No. 5639871
CC GENERAL INFORMATION:
CC APPLICANT: Bauer, Heidi M.
CC APPLICANT: Gravit, Patti E.
CC APPLICANT: Greer, Catherine E.
CC APPLICANT: Imprim, Chaka C.
CC APPLICANT: Manos, M. Michele
CC APPLICANT: Resnick, Robert M.
CC TITLE OF INVENTION: Detection of Human Papillomavirus by the
CC TITLE OF INVENTION: Polymerase Chain Reaction
CC NUMBER OF SEQUENCES: 298
CC CORRESPONDENCE ADDRESS:
CC ADDRESSER: Hoffmann-La Roche Inc.
CC STREET: 340 Kingsland Street
CC CITY: Nutley
CC STATE: New Jersey
CC COUNTRY: U.S.A.
CC ZIP: 07110
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC OPERATING SYSTEM: IBM PC compatible
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/457,648
CC FILING DATE:
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Pety, Douglas A.
CC REGISTRATION NUMBER: 35,321
CC REFERENCE/DOCKET NUMBER: 9205
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (510) 814-2974
CC TELEFAX: (510) 814-2977
CC INFORMATION FOR SEQ ID NO: 285:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 467 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC Sequence 467 BP; 136 A; 94 C; 85 G; 152 T; 0 other;
SQ
Query Match 15.8%; Score 241; DB 6; Length 467;
Best Local Similarity 76.5%; Pred. No. 8.64e-176;
Matches 348; Conservative 0; Mismatches 107; Indels 0; Gaps 0;
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1006 ACCACGCTGAGTACCAATTTACAAATATGCTTCTACACAGCTTCCTTACTGGGCA 1065
 127 TATGATCTCTTAACTTTAAGAAATATACAGCAGCTGGAGAGTATGATTTACATTT 186
 1066 TATGATGCTACCAATTTAAGCAGTATACAGCATGTGAAAGAAATATGATTTGCACTT 1125
 187 AATATTCACGTGTCTACATTTACAACTGATGTATGCTTATATTCACATATG 246
 1126 AATTTTCAGTTATGATCAATTTACTTTAACTGCAAGATGTATGCTTATATTCATATATG 1185
 247 AATTCCTATATTTGACATTTGCAATTTTGGTGTAGCTCTCCACCATTCGCACTTTG 306
 1186 AATGACAGATTTTAAAGATTTGGAATCTTGGTGTCTCCCTCCCACTACTAGTTTG 1245
 307 GTAGACACTTACAGATACAGTCTGACGCAATTCATATGCAAAAGAGTCTCCAGCA 366
 1246 GTGATACATATGCTTTGTACAAATCTGTGCTATTAAGTGTGCAAAAGATGCTGACCA 1305
 367 CCTGAAAGAAAGATCCATATGACGCTTAAAGTTTGGATGTGACTTAAAGGAAAG 426
 1306 GGTGAAATTAAGATCCCATGATTAAGTTTGGATGTGATTTAAAGGAAAG 1365
 427 TTATGTTGGAAGTGTGATGATATCCCTGGAGC 461
 1366 TTTTCTTTGGACTTATGATCAATATCCCTTTGGAGC 1400

RESULT 14
 US-08-474-542A-285 STANDARD; DNA; UNC; 467 BP.
 AC xxxxxx
 01-JAN-1900
 DE Sequence 285, Application US/08474542A.
 CC Sequence 285, Application US/08474542A
 CC Patent No. 5527898
 CC GENERAL INFORMATION:
 CC APPLICANT: Bauer, Heidi M.
 CC APPLICANT: Gravitt, Patti E.
 CC APPLICANT: Greer, Catherine E.
 CC APPLICANT: Impraim, Chaka C.
 CC APPLICANT: Manos, M. Michele
 CC APPLICANT: Resnick, Robert M.
 CC TITLE OF INVENTION: Detection of Human Papillomavirus by the
 CC TITLE OF INVENTION: Polymerase Chain Reaction
 CC NUMBER OF SEQUENCES: 298
 CC CORRESPONDENCE ADDRESS:
 CC ADDRESSEE: Hoffmann-La Roche Inc.
 CC STREET: 340 Kingsland Street
 CC CITY: Nutley
 CC STATE: New Jersey
 CC COUNTRY: U.S.A.
 CC ZIP: 07110
 CC COMPUTER READABLE FORM:
 CC MEDIUM TYPE: Floppy disk
 CC COMPUTER: IBM PC compatible
 CC OPERATING SYSTEM: PC-DOS/MS-DOS
 CC SOFTWARE: Patentin Release #1.0, Version #1.25
 CC CURRENT APPLICATION DATA:
 CC APPLICATION NUMBER: US/08/474,542A
 CC FILING DATE:
 CC CLASSIFICATION: 435
 CC ATTORNEY/AGENT INFORMATION:
 CC NAME: Pelly, Douglas A.
 CC REGISTRATION NUMBER: 35,321
 CC REFERENCE/DOCKET NUMBER: 9234
 CC TELECOMMUNICATION INFORMATION:
 CC TELEPHONE: (510) 814-2974
 CC TELEFAX: (510) 814-2977
 CC INFORMATION FOR SEQ ID NO: 285:
 CC SEQUENCE CHARACTERISTICS:
 CC LENGTH: 467 base pairs
 CC TYPE: nucleic acid
 CC STRANDEDNESS: single

TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 Sequence 467 BP; 136 A; 94 C; 85 G; 152 T; 0 other:
 Query Match 15.8%; Score 241; DB 5; Length 467;
 Best Local Similarity 76.5%; Pred. No. 8,646-116;
 Matches 348; Conservative 0; Mismatches 107; Indels 0; Gaps 0;

7 GCCAGGGTCATTAATATGATATGTTGGCATTAATCAATATTTCTTACTGTTGGAGC 66
 946 GCACAGGGTCATTAATATGATATGTTGGCATTAATCAATATTTCTTACTGTTGGAGC 1005
 67 ACTACCCGATAGCAATCTTACATTAATCTTACTGTTGGAGC 126
 1006 ACCACTCGATAGCAATCTTACATTAATGTTGGCATTAATCAATATTTCTTACTGTTGGAGC 1065
 127 TATGATCTCTTAACTTTAAGAAATATACAGCAGCTGGAGAGTATGATTTACATTT 186
 1066 TATGATGCTACCAATTTAAGCAGTATACAGCATGTGAAAGAAATATGATTTGCACTT 1125
 187 AATATTCACGTGTCTACATTTACAACTGATGTATGCTTATATTCACATATG 246
 1126 AATTTTCAGTTATGATCAATTTACTTTAACTGCAAGATGTATGCTTATATTCATATATG 1185
 247 AATTCCTATATTTGACATTTGCAATTTTGGTGTAGCTCTCCACCATTCGCACTTTG 306
 1186 AATGACAGATTTTAAAGATTTGGAATCTTGGTGTCTCCCTCCCACTACTAGTTTG 1245
 307 GTAGACACTTACAGATACAGTCTGACGCAATTCATATGCAAAAGAGTCTCCAGCA 366
 1246 GTGATACATATGCTTTGTACAAATCTGTGCTATTAAGTGTGCAAAAGATGCTGACCA 1305
 367 CCTGAAAGAAAGATCCATATGACGCTTAAAGTTTGGATGTGACTTAAAGGAAAG 426
 1306 GGTGAAATTAAGATCCCATGATTAAGTTTGGATGTGATTTAAAGGAAAG 1365
 427 TTATGTTGGAAGTGTGATGATATCCCTGGAGC 461
 1366 TTTTCTTTGGACTTATGATCAATATCCCTTTGGAGC 1400

RESULT 15
 US-08-474-542A-296 STANDARD; DNA; UNC; 464 BP.
 AC xxxxxx
 01-JAN-1900
 DE Sequence 296, Application US/08474542A.
 CC Sequence 296, Application US/08474542A
 CC Patent No. 5527898
 CC GENERAL INFORMATION:
 CC APPLICANT: Bauer, Heidi M.
 CC APPLICANT: Gravitt, Patti E.
 CC APPLICANT: Greer, Catherine E.
 CC APPLICANT: Impraim, Chaka C.
 CC APPLICANT: Manos, M. Michele
 CC APPLICANT: Resnick, Robert M.
 CC TITLE OF INVENTION: Detection of Human Papillomavirus by the
 CC TITLE OF INVENTION: Polymerase Chain Reaction
 CC NUMBER OF SEQUENCES: 298
 CC CORRESPONDENCE ADDRESS:
 CC ADDRESSEE: Hoffmann-La Roche Inc.
 CC STREET: 340 Kingsland Street
 CC CITY: Nutley
 CC STATE: New Jersey
 CC COUNTRY: U.S.A.
 CC ZIP: 07110
 CC COMPUTER READABLE FORM:
 CC MEDIUM TYPE: Floppy disk
 CC COMPUTER: IBM PC compatible
 CC OPERATING SYSTEM: PC-DOS/MS-DOS
 CC SOFTWARE: Patentin Release #1.0, Version #1.25
 CC CURRENT APPLICATION DATA:
 CC APPLICATION NUMBER: US/08/474,542A
 CC FILING DATE:

Wed Sep 24 09:33:12 1997

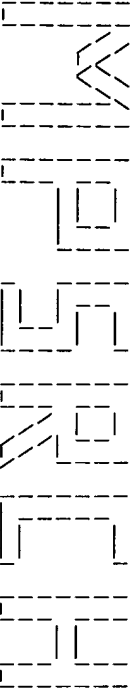
US-08-409-122-1.rni

Page 12

CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Petry, Douglas A.
CC REGISTRATION NUMBER: 35,321
CC REFERENCE/DOCKET NUMBER: 9234
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (510) 814-2974
CC TELEFAX: (510) 814-2977
CC INFORMATION FOR SEQ ID NO: 296:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 464 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
SQ Sequence 464 bp: 136 A; 90 C; 154 G; 84 T; 0 other;

Query Match 14.7%; Score 224; DB 5; Length 464;
Best Local Similarity 75.6%; Pred. No. 1,95e-161;
Matches 353; Conservative 0; Mismatches 111; Indels 3; Gaps 3;
Db 1 CACAGGCTCAGGGTTTAAACANGTATATGTTGGCACATCATGTTTAAACAGTT 60
940 CATAGGACAGGGTCATACANATGTGCTGGCATTAATCAATATTTGTTACTGTG 999
Db 61 GTAGATACTCTGCAGACACCAATCTTCTGTGTGCT-CTACT-ACCTTC-TATTCT 117
1000 GTAGATACCACTGCTGATACCAATTAACAATATGCTTACACAGCTCTCGTACT 1059
Db 118 AATGTATACACACCTTACAGTTTAAAGATATGCCAGCATGTGGAGAAATTTGATTG 177
1060 GGGCAATGTATGCTACCAAAATTTAAGCATATAGCAGATGTTGAAGAAATATGATTG 1119
Db 178 CAGTTATATTTCAACTGTGTAAATAATACATTACTACAGAGTAATGTACATATTCA 237
1120 CAGTTATATTTCAAGTATGTACTATTACTTTACTGACAGATGTTATGTCCTATATTCA 1179
Db 238 AATATGAATACCACTATTTTGGAGATTGGAATTTGGTTTACACCACTCTACTGCT 297
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Db 298 AGTTAGTTGACACATACCTTTTGTCAATCTGCTGTAATCTTGTCTCAAAAGACACC 357
1240 AGTTAGTTGACATATCTTTTGTCAATCTGCTGTAATCTTGTCTCAAAAGACACC 1299
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1360 GAAAGTTTTCGACTTGAATCAATTCCTTGGAGTTTGAATTT 1406

Search completed: Wed Sep 24 00:05:31 1997
Job time : 142 secs.


 ***** (TM)

Release 2.1D John F. Collins, Biocomputing Research Unit.
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MPerch_n n.a. - n.a. database search, using Smith-Waterman algorithm

Run on: Wed Sep 24 00:05:52 1997; Maspar time 813.86 Seconds

Tabular output not generated. 1027,680 Million cell updates/sec

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 Comp: TACCGAAGACGCGCGGATC.....CACATGACGATCTTCATT

Scoring table: TABLE default

Gap 6

Match STD : Dbase 0; Query 0

Searched: 929887 seqs, 27440424 bases x 2
 Post-processing: Minimum Match 08
 Listing first 45 summaries

Database:

n-pending
 1: PCT91 2: PCT92 3: PCT93 4: PCT94 5: PCT95 6: PCT96 7: PCT97
 8: U75.9: U76.10: U77.11: U772.12: U781.13: U782.14: U791.
 15: U792.16: U800.17: U801.18: U802.19: U803.20: U804.21: U805.
 22: U806.23: U807.24: U808.25: U809.26: U810.27: U811.28: U812.
 29: U813.30: U814.31: U815.32: U816.33: U817.34: U818.35: U819.
 36: U820.37: U821.38: U822.39: U823.40: U824.41: U825.42: U826.
 43: U827.44: U828.45: U829.46: U830.47: U831.48: U832.49: U833.
 50: U834.51: U835.52: U836.53: U837.54: U838.55: U839.56: U840.
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Statistics: Mean 10.315; Variance 3.918; scale 2.633

Pred. No. is the number of results predicted by chance to have a
 score greater than or equal to the score of the result being printed,
 and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description	Pred. No.
1	1524	100.0	1524	56	US-08-409-Sequence 1, Applicatio	0.00e+00
2	1524	100.0	1524	56	US-08-409-Sequence 1, Applicatio	0.00e+00
3	721	47.3	7833	62	US-08-468-Sequence 9, Applicatio	0.00e+00
4	526	34.5	1518	67	US-08-641-Sequence 3, Applicatio	0.00e+00
5	524	34.4	1517	63	US-08-472-Sequence 1, Applicatio	0.00e+00
6	524	34.4	1517	63	US-08-475-Sequence 1, Applicatio	0.00e+00
7	524	34.4	1517	63	US-08-472-Sequence 1, Applicatio	0.00e+00
8	522	34.3	1518	67	US-08-641-Sequence 1, Applicatio	0.00e+00
9	504	33.1	1517	63	US-08-475-Sequence 2, Applicatio	0.00e+00

RESULT	ID	US-08-408-669-1	STANDARD	DNA	UNC	1524	BP
AC	xxxxxx	01-JAN-1900					
DE	Sequence 1, Application	US/08408659					
CC	Sequence 1, Application	US/08408659					
CC	GENERAL INFORMATION:						
CC	APPLICANT: HOFMANN, KATHRIN J.						
CC	APPLICANT: JANSEN, KATHRIN U.						
CC	APPLICANT: NEPPER, MICHAEL P.						
CC	TITLE OF INVENTION: DNA ENCODING HUMAN PAPILLOMAVIRUS TYPE 18						
CC	NUMBER OF SEQUENCES: 16						
CC	CORRESPONDENCE ADDRESS:						
CC	ADDRESSEE: CHRISTINE E. CARTY - MERCK & CO., INC.						
CC	STREET: 126 EAST LINCOLN AVENUE - P.O. BOX 2000						
CC	CITY: RAHWAY						
CC	STATE: NJ						
CC	COUNTRY: US						
CC	ZIP: 07065-0907						
CC	COMPUTER READABLE FORM:						
CC	MEDIUM TYPE: Diskette						
CC	COMPUTER: IBM Compatible						
CC	OPERATING SYSTEM: DOS						
CC	SOFTWARE: Fast-SEO Version 1.5						
CC	CURRENT APPLICATION DATA:						
CC	APPLICATION NUMBER: US/08/408,669						
CC	FILING DATE: 22-MAR-1995						
CC	CLASSIFICATION: A35						
CC	PRIOR APPLICATION DATA:						
CC	APPLICATION NUMBER:						
CC	FILING DATE:						
CC	ATTORNEY/AGENT INFORMATION:						
CC	NAME: CARTY, CHRISTINE E						

ALIGNMENTS

RESULT 1
 US-08-408-669-1 STANDARD; DNA; UNC; 1524 BP.

REGISTRATION NUMBER: 36,099
REFERENCE/DOCKET NUMBER: 19424
TELECOMMUNICATION INFORMATION:
TELEPHONE: 908-594-6734
TELEFAX: 908-594-4720
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1524 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MODELOC: CDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE:
ORIGINAL SOURCE:
SQ Sequence 1524 BP: 396 A; 292 C; 337 G; 499 T; 0 other:

Query Match 100.0%; Score 1524; DB 56; Length 1524;
Best Local Similarity 100.0%; Pred. No. 0.00e+00;
Matches 1524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 ATGCTTTGTGGCGGCTAGTACAAATACGTAACCTTCACCTCTCTGTGGCAAGA 60
QY 1 ATGCTTTGTGGCGGCTAGTACAAATACGTAACCTTCACCTCTCTGTGGCAAGA 60
Db 61 GTTGTAATACGATGATTATGACTCGACACACATATTTATCATGCTGGAGCTCT 120
QY 61 GTTGTAATACGATGATTATGACTCGACACACATATTTATCATGCTGGAGCTCT 120
Db 121 AGATTATTAAGTGTGTAATCCATATTTAGGGTCTCGAGGTGGTGAATAGCAG 180
QY 121 AGATTATTAAGTGTGTAATCCATATTTAGGGTCTCGAGGTGGTGAATAGCAG 180
Db 181 GATATTCCTAAGGTTCTGCAATACCAATAGAGATTTTCGGGTGCAGTTACTACCA 240
QY 181 GATATTCCTAAGGTTCTGCAATACCAATAGAGATTTTCGGGTGCAGTTACTACCA 240
Db 241 AATAATTTGTTTACCTGATATATGATTTATATCCGAAACACACAGCTTAGTGG 300
QY 241 AATAATTTGTTTACCTGATATATGATTTATATCCGAAACACACAGCTTAGTGG 300
Db 301 GCCTGTGCTGGAATGGAATGGCGGTGTCAGCTTATAGGTGGCTTAGTGGCAT 360
QY 301 GCCTGTGCTGGAATGGAATGGCGGTGTCAGCTTATAGGTGGCTTAGTGGCAT 360
Db 361 CCATTTTAAATTAATTAATGACACAGAAAGTCCCATGGCGTACGTATATGTTCT 420
QY 361 CCATTTTAAATTAATTAATGACACAGAAAGTCCCATGGCGTACGTATATGTTCT 420
Db 421 GAGAGCGTTAGGACAAATGCTGCTGATATTAACACACAGCTTATATTTGGGC 480
QY 421 GAGAGCGTTAGGACAAATGCTGCTGATATTAACACACAGCTTATATTTGGGC 480
Db 481 TGTGCCCCCTGCTATTTGGGACACAGTGGCTTAAGGACCTGCTGTAATGCGCTCTTA 540
QY 481 TGTGCCCCCTGCTATTTGGGACACAGTGGCTTAAGGACCTGCTGTAATGCGCTCTTA 540
Db 541 TCACAGGCGGATTTGCCCTTTAAGACTTAAGACACAGTTTGGAAAGTGTGATAG 600
QY 541 TCACAGGCGGATTTGCCCTTTAAGACTTAAGACACAGTTTGGAAAGTGTGATAG 600
Db 601 GTAGATCTGATATGTCGATGACATGACTTATAGTCAATGCAAGTACTAATGTGAGTA 660
QY 601 GTAGATCTGATATGTCGATGACATGACTTATAGTCAATGCAAGTACTAATGTGAGTA 660
Db 661 CCATTGATATTTGTCAGTCTATTTGTAATATCCTGATTATTTCAAAATGCTGAGAT 720
QY 661 CCATTGATATTTGTCAGTCTATTTGTAATATCCTGATTATTTCAAAATGCTGAGAT 720
Db 721 CCTATGGGATTCAGATGTTTGTGCTTACGAGTGCAGCTTTTGTAGGCAATTT 780
QY 721 CCTATGGGATTCAGATGTTTGTGCTTACGAGTGCAGCTTTTGTAGGCAATTT 780

QY 721 CCTATGGGATTCAGATGTTTGTGCTTACGAGTGCAGCTTTTGTAGGCAATTT 780
Db 781 TGAATAGGCGAGGTACTATGAGTACACTGTGCTCAATCCTTATATTAAGGACAA 840
QY 781 TGAATAGGCGAGGTACTATGAGTACACTGTGCTCAATCCTTATATTAAGGACAA 840
Db 841 GGTATCGGTGCTACCTGGACAGCTGTGTATTTCCCTCCCAAGGCGCTATGTT 900
QY 841 GGTATCGGTGCTACCTGGACAGCTGTGTATTTCCCTCCCAAGGCGCTATGTT 900
Db 901 ACCTGACCTCCAGTGTGTTAATAACCAATGAGTGCATTAAGGCGAGGCTATAC 960
QY 901 ACCTGACCTCCAGTGTGTTAATAACCAATGAGTGCATTAAGGCGAGGCTATAC 960
Db 961 AATGATCTGCTGCAATATCATATTTGTACTGTGTGATAGACACTCGATAGAC 1020
QY 961 AATGATCTGCTGCAATATCATATTTGTACTGTGTGATAGACACTCGATAGAC 1020
Db 1021 AATTAACTATGCTGCTTACACAGTCTGCTACCTGCGCATATGATGCTACCAA 1080
QY 1021 AATTAACTATGCTGCTTACACAGTCTGCTACCTGCGCATATGATGCTACCAA 1080
Db 1081 TTTAGCAGTATAGCAGACATGTTGAAGATATGATTTGCAATTTTTCAGTTATGT 1140
QY 1081 TTTAGCAGTATAGCAGACATGTTGAAGATATGATTTGCAATTTTTCAGTTATGT 1140
Db 1141 ACTATTAATTAAGTATGATGATGATGATGATGATGATGATGATGATGATGAT 1200
QY 1141 ACTATTAATTAAGTATGATGATGATGATGATGATGATGATGATGATGATGAT 1200
Db 1201 GAGGATGGAATGTTGTTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCCCT 1260
QY 1201 GAGGATGGAATGTTGTTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCCCTCCCT 1260
Db 1261 TTTGTACAACTGTTGCTATTTACCTGCTCAAAAGATGCTGACACAGTGAATAGAT 1320
QY 1261 TTTGTACAACTGTTGCTATTTACCTGCTCAAAAGATGCTGACACAGTGAATAGAT 1320
Db 1321 CCTATGATATGATTAATGTTTGAATGGAATGGAATGGAATGGAATGGAATGGA 1380
QY 1321 CCTATGATATGATTAATGTTTGAATGGAATGGAATGGAATGGAATGGAATGGA 1380
Db 1381 GATCAATATCCCTGACGATTAATTTTGGTGAAGTGGTGGTGGTGGTGGTGGTGG 1440
QY 1381 GATCAATATCCCTGACGATTAATTTTGGTGAAGTGGTGGTGGTGGTGGTGGTGG 1440
Db 1441 ATAGGCGCTGTAAGCTTGTGCTCATCTGCACTAGCTGCTTCTTAACCTGCCAAGCGT 1500
QY 1441 ATAGGCGCTGTAAGCTTGTGCTCATCTGCACTAGCTGCTTCTTAACCTGCCAAGCGT 1500
Db 1501 GTGCGTGTAGTGCAGGAATTA 1524
QY 1501 GTGCGTGTAGTGCAGGAATTA 1524

RESULT 2
ID US-08-409-122-1 STANDARD; DNA; UNC; 1524 BP.

AC xxxxxx
DT 01-JAN-1900
DE Sequence 1, Application US/08409122.
CC GENERAL INFORMATION:
CC APPLICANT: JORGE, JAMES G.
CC APPLICANT: GEORGE, HUGH A.
CC APPLICANT: HOFMANN, KATHRIN J.
CC APPLICANT: JANSSEN, KATHRIN U.
CC APPLICANT: NEPPER, MICHAEL P.
CC TITLE OF INVENTION: DNA ENCODING HUMAN PAPILLOMAVIRUS TYPE 18 VACCINE
CC NUMBER OF SEQUENCES: 16
CC CORRESPONDENCE ADDRESSES:
CC ADDRESSEE: CHRISTINE E. CARLY - MERCK & CO., INC.
CC STREET: 126 EAST LINCOLN AVENUE - P.O. BOX 2000
CC CITY: RAHWAY

CC STATE: NJ
CC COUNTRY: US
CC ZIP: 07065-0907
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Diskette
CC COMPUTER: IBM Compatible
CC OPERATING SYSTEM: DOS
CC SOFTWARE: FastSeq Version 1.5
CC CURRENT APPLICATION DATA: 1.5
CC APPLICATION NUMBER: US/08/409.122
CC FILING DATE:
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: 08/408,669
CC FILING DATE: 22-MAR-1995
CC ATTORNEY/AGENT INFORMATION:
CC NAME: CARLY, CHRISTINE E
CC REGISTRATION NUMBER: 36,099
CC REFERENCE/DOCKET NUMBER: 19425
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 908-594-6734
CC TELEFAX: 908-594-4720
CC TELEX:
CC INFORMATION FOR SEQ ID NO: 1:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 1524 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: cDNA
CC HYPOTHEICAL: NO
CC ANTI-SENSE: NO
CC FRAGMENT TYPE:
CC ORIGINAL SOURCE:
CC Sequence 1524 BP: 396 A; 292 C; 337 G; 499 T; 0 other;

Query Match 100.0%; Score 1524; DB 56; Length 1524;
Best Local Similarity 100.0%; Pred. No. 0.00e+00;
Matches 1524; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 ATGGCTTTGGCGGCGCTAGTACATACCGTATACCTCCACCTCCCTCTGGCAAGA 60
Qy 1 ATGGCTTTGGCGGCGCTAGTACATACCGTATACCTCCACCTCCCTCTGGCAAGA 60
Db 61 GTTGAATACTGATGATTATGTGACTCGCACAGCATATTTATCATGCTGCGAGCTCT 120
Qy 61 GTTGAATACTGATGATTATGTGACTCGCACAGCATATTTATCATGCTGCGAGCTCT 120
Db 121 AGATTATTTACCTGTTGTTATCCATATTTTAGGTTCTCGCAGGTGGTGCATAAGCAG 180
Qy 121 AGATTATTTACCTGTTGTTATCCATATTTTAGGTTCTCGCAGGTGGTGCATAAGCAG 180
Db 181 GATTATTCCTAGGTTTCTGCATACCAATATAGTATTTCCGGGTGCGAGTTACTGCCCA 240
Qy 181 GATTATTCCTAGGTTTCTGCATACCAATATAGTATTTCCGGGTGCGAGTTACTGCCCA 240
Db 241 AATAAATTTGGTTTACCTGATATAGTATTTATATCTCGAACAACAAGTTAGTGTG 300
Qy 241 AATAAATTTGGTTTACCTGATATAGTATTTATATCTCGAACAACAAGTTAGTGTG 300
Db 301 GCGTGTGCGAGGTGGAATTTGGCCGTGTCAGCCCTTTAGGTGGCTTGTAGTGGCAT 360
Qy 301 GCGTGTGCGAGGTGGAATTTGGCCGTGTCAGCCCTTTAGGTGGCTTGTAGTGGCAT 360
Db 361 CCATTTTATATATATATAGTACACTGGAAGTCCCATGCGCTACGCTATGTTTCT 420
Qy 361 CCATTTTATATATATATAGTACACTGGAAGTCCCATGCGCTACGCTATGTTTCT 420
Db 421 GAGGACGTTAGGACAAATGTCTGTAGATTATACGACACAGATTATATTTTGGGC 480
Qy 421 GAGGACGTTAGGACAAATGTCTGTAGATTATACGACACAGATTATATTTTGGGC 480
Db 481 TGTGCCCCCTGATTTGGGGAACACTGGGCTAAAGGCACCTGTTGTAATCGGCTCTTTA 540

Qy 481 TGTGCCCCCTGATTTGGGGAACACTGGGCTAAAGGCACCTGTTGTAATCGGCTCTTTA 540
Db 541 TCACAGGGCGAATTTGCCCTTTAGAACTTAAGAACACAGATTTTGGAGATGATATG 600
Qy 541 TCACAGGGCGAATTTGCCCTTTAGAACTTAAGAACACAGATTTTGGAGATGATATG 600
Db 601 GTAGATCTGATATAGTGGCCATGAGCTTTAGTACATTGCAAGATCTAATATGAGATA 660
Qy 601 GTAGATCTGATATAGTGGCCATGAGCTTTAGTACATTGCAAGATCTAATATGAGATA 660
Db 661 CCATGGAATTTGTGACGCTATTTGTAATATCCTGATTTTAAACAATGTCGCAGAT 720
Qy 661 CCATGGAATTTGTGACGCTATTTGTAATATCCTGATTTTAAACAATGTCGCAGAT 720
Db 721 CCTATGGGGATTTCCATGTTTTTTTGTCTTAGACGTGACAGCTTTTGTAGGCAATTT 780
Qy 721 CCTATGGGGATTTCCATGTTTTTTTGTCTTAGACGTGACAGCTTTTGTAGGCAATTT 780
Db 781 TGAATTAGGACGATGATAGGGGTGACACTGTGCTCAATCCTTATATATTAAGGCACA 840
Qy 781 TGAATTAGGACGATGATAGGGGTGACACTGTGCTCAATCCTTATATATTAAGGCACA 840
Db 841 GGTATGCGCTTCACCGCGGACGCTGTGATTCCTCCCTCCAGTGGCTATTTGT 900
Qy 841 GGTATGCGCTTCACCGCGGACGCTGTGATTCCTCCCTCCAGTGGCTATTTGT 900
Db 901 ACCCTGACTCCAGTTGTTTAAATAACCATTTGTTACATTAAGGACAGGGTCATAC 960
Qy 901 ACCCTGACTCCAGTTGTTTAAATAACCATTTGTTACATTAAGGACAGGGTCATAC 960
Db 961 AATGATCTGCTGGCATATCAATATTTGTTACTGTGATAGATACACTGATAGTACC 1020
Qy 961 AATGATCTGCTGGCATATCAATATTTGTTACTGTGATAGATACACTGATAGTACC 1020
Db 1021 AATTTAAACAATATGCTGCTTACACAGTCTCCTGACTGGGCAATATGATCTACCAA 1080
Qy 1021 AATTTAAACAATATGCTGCTTACACAGTCTCCTGACTGGGCAATATGATCTACCAA 1080
Db 1081 TTTAAGCAGTATAGCAGACATGTTGAATAATATGTTGCAATTTTACGATTATGT 1140
Qy 1081 TTTAAGCAGTATAGCAGACATGTTGAATAATATGTTGCAATTTTACGATTATGT 1140
Db 1141 ACTATTTACTTTAAGTACAGATGTTATGCTATATTTCAATATGATATAGAGATTTTA 1200
Qy 1141 ACTATTTACTTTAAGTACAGATGTTATGCTATATTTCAATATGATATAGAGATTTTA 1200
Db 1201 GAGGATTTGGAATTTGGTTCCTCCCGCCCACTACTAGTTTGGTGAATACATATGCT 1260
Qy 1201 GAGGATTTGGAATTTGGTTCCTCCCGCCCACTACTAGTTTGGTGAATACATATGCT 1260
Db 1261 TTTGATCAATGCTGTTGATTAACCTGTCAAAAGATGCTGACCGAGTAATAGGAT 1320
Qy 1261 TTTGATCAATGCTGTTGATTAACCTGTCAAAAGATGCTGACCGAGTAATAGGAT 1320
Db 1321 CCCATGATTAAGTTTAAAGTTTGGAAATGATTTTAAAGGAAAGTTTCTTTGGACTTA 1380
Qy 1321 CCCATGATTAAGTTTAAAGTTTGGAAATGATTTTAAAGGAAAGTTTCTTTGGACTTA 1380
Db 1381 GATCAATATCCCTTTGGAAGATTTTGGTTCAGGCTGATGCTGCGAAGCCACC 1440
Qy 1381 GATCAATATCCCTTTGGAAGATTTTGGTTCAGGCTGATGCTGCGAAGCCACC 1440
Db 1441 ATAGCCCTCGTAAAGCTTTGCTCATCTGCACTAGCTCTTAAACCTGCGAAGGCT 1500
Qy 1441 ATAGCCCTCGTAAAGCTTTGCTCATCTGCACTAGCTCTTAAACCTGCGAAGGCT 1500
Db 1501 GTGCGTGTACGTCAGGAGATTA 1524
Qy 1501 GTGCGTGTACGTCAGGAGATTA 1524

RESULT 3

ID US-08-468-057A-9 STANDARD; DNA; UNC; 7833 BP.
AC xxxxx
DT 01-JAN-1900
DE Sequence 9, Application US/08468057A.
CC Sequence 9, Application US/08468057A
CC GENERAL INFORMATION:
CC APPLICANT: Orch, Gerard
CC APPLICANT: Volpers, Christoph
CC APPLICANT: Streek, Rolf
CC TITLE OF INVENTION: DNA Sequences Derived from the Genome of
CC TITLE OF INVENTION: the Papillomavirus HPV39, Their Use in In Vitro Di
agnos
CC TITLE OF INVENTION: and for the Production of an Immunogenic Compositi
on
CC NUMBER OF SEQUENCES: 11
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
CC STREET: 1300 I Street, N.W.
CC CITY: Washington
CC STATE: DC
CC COUNTRY: USA
CC ZIP: 20005-3315
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/468,057A
CC FILING DATE: 06-JUN-1995
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: US 08/074,879
CC FILING DATE: 16-JUN-1993
CC APPLICATION NUMBER: WO 92/1136
CC FILING DATE: 09-JUL-1992
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Potler, Jane E.R.
CC REGISTRATION NUMBER: 33,332
CC REFERENCE/DOCKET NUMBER: 02356.0066-00000
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-408-4000
CC TELEFAX: 202-408-4400
CC INFORMATION FOR SEQ ID NO: 9:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 7833 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC Sequence 7833 BP: 2426 A; 1485 C; 1660 G; 2262 T; 0 other;
Query Match 47.3%; Score 721; DB 62; Length 7833;
Best Local Similarity 74.8%; Pred. No. 0.00e+00;
Matches 110; Conservative 0; Mismatches 371; Indels 3; Gaps 1;

Db 5883 AATAAATCAGTATCCAGATGCAATCCCTTATATATCCAGAAACACACAGTTAGTAGG 5942
Qy 241 AATAATTTGTTTACCTGATATATATATATATATCTGAAACACACAGTTAGTGTG 300
Db 5943 CTTGTGTAGGGGTGAGAGTGGAGGCGAGCGATGGGTGTGTTAGTAGAGACAC 6002
Qy 301 GCGTGTGTAGAGTGAATATGCGCGTGTGACCTTTAGTGTGTGCGTTAGTGGGAT 360
Db 6003 CCAATTATATATGACAGAGATGATGATAAATCTAC---CATTTACCAACACACAT 6059
Qy 361 CCAATTATATATATATGATGACAGAGATGATAAATCTACCGCGCTGCTAGTGTTC 420
Db 6060 AAGGACAGTAGGATATATGTCTGTGTGATTTAAACAGACACAGTTGTGCTTAGGC 6119
Qy 421 GAGGACGTTAGGACAAATGTCTGTAGATTTAAAGCAGACAGATGATATGTGCGC 480
Db 6120 TGTGTCCGCCCATTTGGGAGACACTGGGGTAAGGAAAGGATGACACCAATATGTA 6179
Qy 481 TGTGCCCCCTGCTATTTGGGGAACACTGGCGCTAAAGGCACTGCTGTAAATGCGCTTTA 540
Db 6180 TCTACGGGGGACGTCTCTCTTGTGAAGTAAACACCCCTATGAGATGATATG 6239
Qy 541 TCACAGGGCGATGCCCCCTTTAGAACCTTAAGAACACAGTTTGGAAATGATATG 600
Db 6240 ATTGATCTGCTATGAGAGCTATGAGCTATGCTGATTTGAGAACCAAAAGTAGGTG 6239
Qy 601 GTAGATCTGATATGATGCTCATGACTTATGACATGCAAGATATCTAAATGTAGGTA 660
Db 6300 CTTTATATATTTGTCAATCAATCTGTAATATCTGATTTATTTGCAATGTCTGCAAT 6359
Qy 661 CCATATGATATTTGTGACATCTATTTGTAATATCCGATTTATTACAAATGCTCAGAT 720
Db 6360 GTGTGAGGAGCATGATGTTCTGCTGTTACGAGGAAACAGCTTTGACAGACATTT 6419
Qy 721 CCTATGGGATTCATGATTTTTTTCCTACGACGAGACAGCTTTTGCAGAGCATTT 780
Db 6420 TGGATCTGTGTATGATGAGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 6479
Qy 781 TGGATATGAGCAGTACTATGAGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 840
Db 6480 GATATACGTGGAACCCGCTAGTCTGTAATGCTGCTGCTGCTGCTGCTGCTGCTGCT 6539
Qy 841 GATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 900
Db 6540 ACCCTGATCCCATTTATTTAATAGCCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCT 6539
Qy 901 ACCCTGATCCCATTTATTTAATAGCCTTATGCTGCTGCTGCTGCTGCTGCTGCTGCT 960
Db 6600 AATGATATGTTGGCAATCAATTTATTTCTTACTGTTGTGACACTACCGCTATGAC 6659
Qy 961 AATGATATGTTGGCAATCAATTTATTTCTTACTGTTGTGACACTACCGCTATGAC 1020
Db 6660 AACTTATATATCTATGATATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 6719
Qy 1021 AATTTATCAATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1080
Db 1081 TTTAAGATATATACAGCAGCTGAGAGATATTTAATTTAATTTAATTTAATTTAATTT 1140
Qy 6780 ACTGTACATATACAGTATGATGTTATGCTTATATTTACACTATGATTTCTCTATATG 6839
Db 1141 ACTATATCTTATACGAGATGTTATGCTTATATTTACACTATGATTTCTCTATATG 1200
Qy 6840 GACATTTGAATTTGCTGAGTCTCTACACATCTCCAGTTTGTGTGACACTTACAGA 6899
Db 1201 GAGGATTTGAATTTGCTGAGTCTCTACACATCTCCAGTTTGTGTGACACTTACAGA 1260
Qy 6900 TACTTACATCTGAGCATTATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 6959
Db 1261 TTTTATACATCTGTTGCTATTTACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1320
Qy 6960 CCAATATGACGCTCTAAGTTTGTGAATGTTGACTTAAGGAAAGTTAGTTTGAATCTT 7019

QY 1321 CCTATGATGAAGTGAAGTTGGATGTGATTTAAAGAAAAGTTTCTTGACCTTA 1380
Db 7020 GATCAATTCCTTGGAGCGTAATTTTGTGCAGGCCAGGGGTCCGACGGCCCTACT 7079
QY 1381 GATCAATATCCCTGGAGCTAAATTTTGTGTCAGCGTGGATGGTGGCAAGCCAC 1440
Db 7080 AATAGTCCCCGAAGCGGCTGCTGCATCCACTTCTGCTCTC 7123
QY 1441 AATAGCCCTGTAACGTTGCTCATCTGCACACTACCTCTTC 1484

RESULT 4
ID US-08-641-570-3 STANDARD; DNA; UNC; 1518 BP.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 3, Application US/08641570.
CC Sequence 3, Application US/08641570
CC GENERAL INFORMATION:
CC APPLICANT: Durst, Matthias
CC APPLICANT: Gissman, Lutz
CC TITLE OF INVENTION: A DNA SEQUENCE ENCODING A PAPILLOMAVIRUS
CC TITLE OF INVENTION: L1 PROTEIN CAPABLE OF EFFICIENTLY FORMING VIRUS-LI
KE

CC TITLE OF INVENTION: PARTICLES
CC NUMBER OF SEQUENCES: 6
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Birch, Stewart, Kolasch & Birch, LLP
CC STREET: P.O. Box 747
CC CITY: Falls Church
CC STATE: Virginia
CC COUNTRY: USA
CC ZIP: 22040-0747
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent Release #1.0, Version #1.30
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/641,570
CC FILING DATE:
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: US 08/092,528
CC FILING DATE: 16-JUL-1993
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Svensson, Leonard R.
CC REGISTRATION NUMBER: 30330
CC REFERENCE/DOCKET NUMBER: 147-133P
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 703-205-8000
CC TELEFAX: 703-205-8050
CC INFORMATION FOR SEQ. ID NO: 3:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 1518 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: not relevant
CC TOPOLOGY: not relevant
CC MOLECULE TYPE: DNA (genomic)
CC HYPOTHEICAL: NO
CC FEATURE:
CC NAME/KEY: CDS
CC LOCATION: 1..1518
SQ Sequence 1518 BP; 488 A; 292 C; 285 G; 453 T; 0 other;

Query Match 34.5%; Score 526; DB 67; Length 1518;
Best Local Similarity 69.0%; Pident. No. 0.00e+00;
Matches 983; Conservative 0; Mismatches 439; Indels 3; Gaps 2;

Db 1 AATGCTTTGGCTGCTGAGGCGACGTCTACTGCTCTGCCAGATATAG 60
QY 1 ATGCGTTTGGCGGCTGATGACATACCGTATACCTTCCACCTCTCTGTGGCAAGA 60

Db 61 GTTGTAGCAGCGATGAATATGTCTGACGCACAAATATATATATGACGAGAACATCC 120
QY 61 GTTGTAAATACGATGATATGTGACTGCACAAACATATTTATCATGCGCAGCTCT 120
Db 121 AGACTACTGTCAGTTGGAGACCTCTATTTTCTCTATAAAAAACCTAACAAATATA 180
QY 121 ACATTTATTAAGTGTGTTGATCAATATTTTGGGTTCTCGCAGGTGGCAATAGCAG 180
Db 181 TTAGTCTTAAGATATCAAGATTACAAATACAGGATTTAGATATCAATTTACTGACCC 240
QY 181 GATATTTCCTAAGGTTTCTGACATACCAATATAGATTTTGGGTGCATACCTACCA 240
Db 241 AATTAAGTTGGTTTCTGACACCTCATTTTAAATCCAGATACACAGCGCTGTTGG 300
QY 241 AATTAAGTTGGTTTCTGACACCTCATTTTAAATCCGTAACCAACAGTTTACTGTGG 300
Db 301 GCCTGTAGTGTGAGGTAGGTGCTGCTGCATTAAGTGTGGGATTTGTTGGCAT 360
QY 301 GCTGTGCTGAGTGAATTTGGCCGTGGTCCGCTTGAAGTGTGGCTTGTGGCAT 360
Db 361 CCTTATTTAAATTAATTTGATGACACAGAAATGCTAGTCTTATGACGAATGCAAGT 420
QY 361 CATTTTAAATTAATTTGATGACACAGTGAATGCTAGTCCATGCGCTACGCTATGTTCT 420
Db 421 GTGATATAGAAATGATATATATGATTAACAACAACAATGTTGTTAAATGTT 480
QY 421 GAGGACGTAGGAGCAATGTCTGATTAATTAAGACAGACAGATTAATTTTGGGC 480
Db 481 TGCAAAACCACTATAGGGGAACTGGGGCAAGAGTCCCATGACCAATGTTCCAGTA 540
QY 481 TGTGCCCTGCTATTTGGGAACTGGGTAAGGCACTGCTGTAATCGGCTCTTTTA 540
Db 541 AATCCAGTATGTTGCCACCATTAAGTTAATAACACAGTATTCAGAGTGTATATG 600
QY 541 TCACAGGGGATTTGCCCTTACAGCTAAGAACACAGTTTGGAGATGTATATG 600
Db 601 GTTATAGTGGCTTTGGTGTATGACATTTACTACATTAACAGGCTAACAAAATGAATT 660
QY 601 GTAGATAGTGAATGATGTCGACATGACCTTATGATTCAGAAATGATGAGTA 660
Db 661 CCACGTGATTTGATACATCTATTTGCAAAATGCCAATTAATTAATTAATGTTGACGA 720
QY 661 CCATTTGATATTTGATGATTTGTAATTAATTCCTGATTTATTAACAATGCTCCAGAT 720
Db 721 CCATATGGCAGACCTTATTTTATTTACGAGGAAACAATGTTGTAGACATTTA 780
QY 721 CCTATATGGGATTCATGTTTATTTTGTCTTACGACGTGACACCTTTTCTAGGATTTT 780
Db 781 TTTAATAGGGCTGTACTGTGTGTAATAATGTACAGAGATTTATACATTAAGGCTCT 840
QY 781 TGAATATAGGAGTACATATGAGGTGACACTGCTCAATCCTTAATTAATTAAGGACA 840
Db 841 GGGTCTACGCAAAATTTAGCCAGTTCAATTTTCCACACCTAGTGTTCTATGTT 900
QY 841 GGTATGCGTGTCCACCTGCGACGTGTGTATTCCTCTCCACAGTGGCTCTATGTT 900
Db 901 ACCCTGATGCCCAATATATCAATTAACCTTATTTGTTACACAGCAGCAGGCGCAAT 960
QY 901 ACCTCTGACTCCAGTGTGTTAATAACCATTTGTTTACATTAAGGACACAGGCTCATAC 960
Db 961 AATGCAATTTGTTGGGTAAACCACTATTTGTACTGTTGTATGATACACGACGATA 1020
QY 961 AATGATATCTGCTGCAATATCAATTAATTTGTTACTGTGTATGATACACCTGTAGTACC 1020
Db 1021 AATATGCTATATGTCCTGCCATATCTACTAGAACTA--CA-TATTAATAATCTAAC 1077
QY 1021 AATTTAACAATATGCTTCTACACAGTCTCCTGTACCTGGGCAATATGATGCTCCAAA 1080
Db 1078 TTTAAGAGTATCTAGACATGAGGAGGAATATGATTAACATTTATTTTCAACTGTGC 1137
QY 1081 TTTAAGCAATATAGCAGACATGTTGAAGATATGATTTGACATTTTATTTTACGTATATG 1140
Db 1138 AAATTAACCTTAATGCAAGAGCTATGACATACATATTCATTAATTCATATTTTG 1197

1141 ACTATTACTTAACTGACAGATGTTATGCTCTATATTCATAGATGATAGAGATTTTAA 1200
Db 1198 GAGGACTGGAATTTTGGTCTACACCTCCCGGAGGACACACTAGAAAGTACTATAGG 1257
Qy 1201 GAGGATTGGAACCTTGTGTCTCCCGGAGGACACTAGATTTTGGTATACATATCGT 1260
Db 1258 TTGTACATCCAGGCAATTCCTGTCAAAAAACATACACCTCCAGCACTAAAGAGAT 1317
Qy 1261 TTGTACAAATCTGTTCTATATACCTGTCAAAAAAGATGTGACACAGCTGAATAAGGAT 1320
Db 1318 CCCCTTAAAAAATACACTTTTGGAGATTAATTTAAAGAAAGTTTCTGCAGACCTA 1377
Qy 1321 CCTATGATAGTTAAAGTTTGGAGATGTGATTTAAAGAAAGTTTCTTGGACTTA 1380
Db 1378 GATCAGTTCTTTAGGAGCAATTTTACTACAGAGAGATTG 1422
Qy 1381 GATCAATATCCCTTGAGCTAAATTTTGGTTCAGGCTGAGATTG 1425

RESULT 5
ID US-08-472-673-1 STANDARD; DNA; UNC; 1517 BP.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 1, Application US/08472673.
CC Sequence 1, Application US/08472673.
CC GENERAL INFORMATION:
CC APPLICANT: Lowy, Douglas R.
CC APPLICANT: Schliker, John T.
CC TITLE OF INVENTION: SELF-ASSEMBLING RECOMBINANT
CC TITLE OF INVENTION: PAPILLOMAVIRUS CAPSID PROTEINS
CC NUMBER OF SEQUENCES: 6
CC CORRESPONDENCE ADDRESS:
CC ADDRESS: KNOBE, MARTENS, OLSON & BEAR
CC STREET: 620 Newport Center Drive, Sixteenth Floor
CC CITY: Newport Beach
CC STATE: CA
CC COUNTRY: USA
CC ZIP: 92660
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: PatentIn Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/472,673
CC FILING DATE: 07-JUN-1995
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: US 08/032,869
CC FILING DATE: 16-MAR-1993
CC APPLICATION NUMBER: US 07/941,371
CC FILING DATE: 03-SEP-1992
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Kirkpatrick Ph.D., Anita M.
CC REGISTRATION NUMBER: 32,617
CC REFERENCE/DOCKET NUMBER: NIH032.001CP1
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 619-235-8550
CC TELEFAX: 619-235-0176
CC INFORMATION FOR SEQ ID NO: 1:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 1517 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC HYPOHETICAL: NO
CC ANTI-SENSE: NO
CC ORIGINAL SOURCE:
CC ORGANISM: Human papillomavirus
CC STRAIN: HPV16

CC FEATURE:
CC NAME/KEY: CDS
CC LOCATION: 1..1517
CC Sequence 1517 BP; 487 A; 293 C; 284 G; 453 T; 0 other;
SQ
Query Match 34.4%; Score 524; DB 63; Length 1517;
Best Local Similarity 68.9%; Pred. No. 0.00e+00;
Matches 982; Conservative 0; Mismatches 440; Indels 3; Gaps 2;
Db 1 ATGTCTCTTGGCTGCTAGTAGGCGCAGCTGTCTACTTCCCTGCTGCCAGTATCTAG 60
Qy 1 ATGGCTTTTGGCGCGGCTGTGACAAATACCGTATACCTTCCACCTCTCTGTGGGAGAA 60
Db 61 GTTGTACACGAGATGATATGTTCACAGCAAAAGATATATATATATATATATATATAT 120
Qy 61 GTTGTAAATFAGTATGATATATGTGACTGCGCAAGCATTTTATCATGTGGCAGCTCT 120
Db 121 AGACTACTGAGTGGACATCCCTATTTCTATTAATAAAACCTAACAAATAAATA 180
Qy 121 AGATTATTAAGTGTGATATCCATATTTTGGGTCTCGAGGTGGGCAATAAGCAG 180
Db 181 TTAGTTCTTAAGATAGATAGATATACATACAGGATTTTAAAGATATATATACGTGACC 240
Qy 181 GATATTCCTAAGGTTTCTGTGATACCAATATAGATATTTTGGGTGCAATACGTACCA 240
Db 241 AATAGTTTGGTTTCTGTGACACCTCATTTATATATCCAGATATACAGCGGCTGGTTGG 300
Qy 241 AATAAATTTGGTTTACTGTATATAGTATATATATATATATATATATATATATATAT 300
Db 301 GCGTGTAGGTGTGTAGAGTGTGCTGACAGCAATAGGTGGTGGATATAGTGGCAT 360
Qy 301 GCGTGTAGGTGTGTAGAGTGTGCTGACAGCAATAGGTGGTGGATATAGTGGCAT 360
Db 361 CTTTATTTAATTTATTTGATGACACAGAAATGCTATGCTTATGACAGCAATGCAAGT 420
Qy 361 CCAATTTTAAAT 420
Db 421 GTGATATATAGAT 480
Qy 421 GAGGAGCTAGGAGCAATGTGTGTATATATATATATATATATATATATATATATAT 480
Db 481 TGCAACCACTATATAGGAGCACTGGGGCAAGAGATCCCATATGATGTCAGTA 540
Qy 481 TGTGCCCTGTATTTGGGAGCACTGGGGCTAAAGGCACTGTGTGAATCCGCTCTTA 540
Db 541 AATCCAGTGAATGTCCACCATTAAGATTAATAACAGATTAATTCAGAGTGTGATATG 600
Qy 541 TCACAGGGGAGATGCCCCCTTTAGACTTAAGAACAGATTTTGGAGATGGATATG 600
Db 601 GTTCATACTGCTTGGTGTATAGACTTTTACTATATACATTACAGGCTAACAAAGTGAAT 660
Qy 601 GTAGATACGATATGCTGACGACTTGTATGATGATGACAGATATATATATATATAT 660
Db 661 CCACTGATATTTATATATATTTGCAAAATATCCATATATATATATATATATATAT 720
Qy 661 CCAATGATATTTGCACTATTTGTATATATATATATATATATATATATATATATAT 720
Db 721 CCATATAGGAGCACTATTTTATTTTATAGAGGAGAAATGTTTGTAGACATTTA 780
Qy 721 CCTATAGGAGATTCATGTTTGTGTGTACGAGAGTATGAGATTTTGTAGGCAATTT 780
Db 781 TTTAATAGCGGCTAGTGTGTGTGAAATATACAGACATTTATATATATATATATAT 840
Qy 781 TGAATAGGCGAGTACTATGGGTGACACTGTGCTCAATCCCTATATATATATATAT 840
Db 841 GGGCTACAGCAATTTAGCCATTTCAATATATTTTCTTACACTATAGGTCTATAGTT 900
Qy 841 GGTATCGGCTTCACTGCGAGCTGTGTATATCTCTCTCCAGAGGCTATATTTT 900
Db 901 ACCTGTGATCCCAATATTCATTAACCTATATTTGTTACAGAGCAACAGGCCACAT 960
Qy 901 ACCTGTGATCCCAATTTTATTAATACCATATTTGTTACATAGGCAACAGGCTATAT 960

Db	961	AATGGCAATTGTGGGGTAACCAACTATTTGTTACTGTTGTTGATACATACACGACATACA	1020
Qy	961	AATGGTATCTGGCGGCAATAATCAATATTTGTTACTGTTGGTGGATGACCACTGATACCC	1020
Db	1021	AATATGCATATATGTGGTGCATATCTACTCTGAGAACTA--CA-TATCAAAATACATAAC	1077
Qy	1021	AATTTAAACAATATGTGCTTTTACACAGCTCTCCTGTAAGTGGCAATATGATGCTACAAA	1080
Db	1078	TTTAAAGAGTACCTACGACATGGGGAGAAATGATTTACAGTTATTTTCAACTGTGC	1137
Qy	1081	TTTAAAGAGTATAGACACATGTTGAAGAATATGATTTGCACTTTATTTTCAAGTATNGT	1140
Db	1138	AAATTAACCTTAAGTACGACAGCTTATGACATATACATATTCATATAATTCACATATTTG	1197
Qy	1141	ACTATTAATCTTAATCTGACAGATGTTATGCTCATATTCATAGTATGAAAGAGATATTTTA	1200
Db	1198	GAGACATGGAAATTTGGCTTACAAACCTCCCGCCAGGAGGACACTGATGATGATTAATAG	1257
Qy	1201	GAGATTTGGAACCTTGGTGTGTTCCCGCCGCAACTACTAGTTTGGTGGATACATATGCT	1260
Db	1258	TTTGTAACTATCCCGCAAGATGCTGTGTCAAAAACATACACACTCCAGCACTTAAGAAGAT	1317
Qy	1261	TTTGTACATATCTGTGCTATTAATCTGTCAAAAGAGATGCTGCACAGCTGAAAATAGAT	1320
Db	1318	CCCTTAATAAAATPACACTTTTGGGGAAGTAAATTTTAAAGAAAAGTTTCTGACAGACTA	1377
Qy	1321	CCCTATGATTAAGTAAATGTTTGGATGTGGATTTTAAAGAAAAGTTTCTTGTGACTTA	1380
Db	1378	GATCAGTTTCCTTAGAGCGCAATTTTACTATCTACAAAGCAGGATTG	1422
Qy	1381	GATCAATATCCCTTGGACGCTAAATTTTGGTTCAGCGCTGATTG	1425

RESULT 6

ID US-08-475-782-1 STANDARD; DNA; UNC; 1517 BP.

DT xxxxx

AC 01-JAN-1900

DE Sequence 1, Application US/08475782.

CC Sequence 1, Application US/08475782

CC GENERAL INFORMATION:

CC APPLICANT: Lowy, Douglas R.

CC APPLICANT: Schiller, John T.

CC APPLICANT: Kirnbauer, Reinhard

CC TITLE OF INVENTION: SELF-ASSEMBLING RECOMBINANT

CC TITLE OF INVENTION: PAPILLOMAVIRUS CAPSID PROTEINS

CC NUMBER OF SEQUENCES: 6

CC CORRESPONDENCE ADDRESS:

CC ADDRESSEE: KNOBE, MARTENS, OLSON & BEAR

CC STREET: 620 Newport Center Drive, Sixteenth Floor

CC CITY: Newport Beach

CC STATE: CA

CC COUNTRY: USA

CC ZIP: 92660

CC COMPUTER READABLE FORM:

CC MEDIUM TYPE: Floppy disk

CC COMPUTER: IBM PC compatible

CC OPERATING SYSTEM: PC-DOS/MS-DOS

CC SOFTWARE: PatentIn Release #1.0, Version #1.25

CC CURRENT APPLICATION DATA:

CC APPLICATION NUMBER: US/08/475,782

CC FILING DATE: 07-JUN-1995

CC CLASSIFICATION: 424

CC PRIOR APPLICATION DATA:

CC APPLICATION NUMBER: US 08/032,869

CC FILING DATE: 16-MAR-1993

CC APPLICATION NUMBER: US 07/941,371

CC FILING DATE: 03-SEP-1992

CC ATTORNEY/AGENT INFORMATION:

CC NAME: Kirkpatrick Ph.D., Anita M.

CC REGISTRATION NUMBER: 32,617

CC REFERENCE/DOCKET NUMBER: NIH032.001CP1

CC TELECOMMUNICATION INFORMATION:

CC TELEPHONE: 619-235-8550

CC	TELEFAX:	619-235-0176
CC	INFORMATION FOR SEQ ID NO:	1:
CC	SEQUENCE CHARACTERISTICS:	
CC	LENGTH:	1517 base pairs
CC	TYPE:	nucleic acid
CC	STRANDEDNESS:	single
CC	TOPOLOGY:	linear
CC	MOLECULE TYPE:	DNA (genomic)
CC	HYPOTHETICAL:	NO
CC	ANTI-SENSE:	NO
CC	ORIGINAL SOURCE:	
CC	ORGANISM:	Human papillomavirus
CC	STRAIN:	HPV16
CC	FEATURE:	
CC	NAME/KEY:	CDS
CC	LOCATION:	1..1517
CC	Sequence	1517 bp; 487 A; 293 C; 284 G; 453 T; 0 other;
CC		
CC	Query Match	34.4%; Score 524; DB 63; Length 1517;
CC	Best Local Similarity	68.9%; Pred. No. 0.00e+00;
CC	Matches	982; Conservative 0; Mismatches 440; Indels 3; Gaps 2
DG	1	ATGTCTTTGGCGTCCTAGTGAAGGCCACTCTACCTTGCTCCTGTGCCAGTAATCTAG 60
OY	1	ATGGCTTTGTGGCGGCCCTAGTAGCAATACCCTAATACCTTCACCTCCCTGTGGCAGA 60
DG	61	GTTGAACACGGAGATATGTTGCACGCAAAACAATATTATCATGACGAGAACATCC 120
OY	61	GTTGTAATPACGATGATTAATGCTACTGCAACAGCATATTATATCATGCTGGCAGCTT 120
DG	121	AGACACTCTGGACAGTGGACATCCCATTCTCTATAAAAAACCTAACAATACCAATA 180
OY	121	AGATTATTAACGTTGGTAATCAATATTTTAGGGTCTCTGAGGTGGGCAATAACAG 180
DG	181	TTAGTTCCTAAGATATCAGATTCACATACAGGGTATTAGAAATATTAATCTGACCCC 240
OY	181	GATATTCCTAAGGTTCTGCATACCAATATAGATATTCCGGTGCAGTTACCTGACC 240
DG	241	AATAAGTTGGTTTTCCGACACCCATTATATATCCAGATACACAGCGCGTGGTGG 300
OY	241	AATAAATTTGGTTACCTGATTAATATATTAATCTGAAACACACAGTTTGTGG 300
DG	301	GCCCTGTAGGTGTGAGAGTAGTCGTGTCAGGCATTAGTGTGGCATTAGTGGCCAT 360
OY	301	GCCCTGCTGGAGTGGGAATTTGGCCGTGTCAGCCTTAGGTGTGGCCTTAGTGGGCAT 360
DG	361	CCTTTATTAATTAATTTGSATGACACAGAAAATGCTAGTCTTATGACGAATGCAGT 420
OY	361	CAATTATTAATTAATTTAGATGACACTGAAAGTTCCCATCGCGCTAGCTTAATGTTCT 420
DG	421	GTGGATTAATAGAAATGATATCTATGATTAACAACAACAATGTGTATTTGGT 480
OY	421	GAGGACGTTAGGGCAAAATGTCTGTAAATTTAAGCAGACAGATATGATTTTGGC 480
DG	481	TGCAAACACCACTATPAGGGGAACCTGGGGGCAAGGATCCCCATTACCAATGTTGCAGTA 540
OY	481	TGTGCCCCCTGCTATTGGGGAACACTGGGCTTAABGCACTGCTTTAATGCGCTCTTTA 540
DG	541	AATCCAGGTGATTTGCCACATTAAGAGTTAATAACACAGTATTTCAGATGATGATG 600
OY	541	TCACAGGGCGAATGGCCCCCTTTAGAACTTAAGAAACAAGTTTGAAGAATGGATATG 600
DG	601	GTTCACTACTGGCTTTGGTGTATGAGCACTTCTATACAGGCTAACAAAGTGAAGTT 660
OY	601	GTAGTACTGTGTAATGAGCCATGCACTTGTACATTCGCAAGTACTAATATGTGAGATA 660
DG	661	CCACAGGATTTTGTACATCTATTGGCAAATATCCAGATTTTATTAAGATGGTGCAGAA 720
OY	661	CAATTGATTTTGTCACTATTTGTAAATATCTCGATTATTTACAAAGTGTGCAGAT 720
DG	721	CCATATGGCAGAGCTTTTATTTATTAAGAGGGAACAATGTTTGTAGACATTTA 780
OY	721	CGTATGGGGAATCATATTTTTTTTGGCTAGAGSAGTGGAGCTTTTGGTGAAGCATTTT 780

QY 541 TCACAGGGGCGATTGGCCCCCTTTAGACTTAAGAACACAGTTTGGAGAGTGTATAG 600
DB 601 GTTCACTACTGCTTTGGTGTCTATGAGCTTTACTACATTAACAGCTAACAAGTGAAGTT 660
QY 601 GTAGATACAGTGAATAGTCCATGAGCTTTAGTACATTCAGAGATACATAATGTGAGTGA 660
DB 661 CCACGAGATATTTGATACATCTATTTGCAAAATCCAGATATATTAATAATGCTGCAGAA 720
QY 661 CCATTGGAGATTTGTAGCTATTTGTAATAATCCGATATTTTACAAATGCTCGAGAT 720
DB 721 CCATATGGCAGACAGCTTATTTTATTATTCAGAGAGCAAAATGTTTGTAGACATTA 780
QY 721 CCTATGGGAGATTCATGTTTGTCTTACACAGTGCAGACACTTTTGTCTAGGCAATTT 780
DB 781 TTTAATAGGCGTGTACTGTGTGTAATAATGACAGAGATTTATACATTTAAGGCTCT 840
QY 781 TGAATATAGGCGAGTACTATGTGGTGACACTGTGCTCAATCCTTATATATTAAGGCACA 840
DB 841 GGGTCTACTGCAAATTTAGCCAGTTCAAATTTTCTTACACCTAGTGTCTATAGTT 900
QY 841 GGTATGCGTCTTCACTGCGACGCTGTGTATCTCCCTCCCAAGTGGCTCTATTTGTT 900
DB 901 ACCCTGATGCCAATATATTCATTAACCTTATGTTGTTACACAGACAGGCGCAAT 960
QY 901 ACCCTGATGCCAATATATTCATTAACCTTATGTTGTTACACAGACAGGCGCAAT 960
DB 961 AATGCAATTTGTTGGGGTGAACCAACATTTTGTACTGTTGTATGATACACAGCAGTACA 1020
QY 961 AATGCAATTTGTTGGGGTGAACCAACATTTTGTACTGTTGTATGATACACAGCAGTACC 1020
DB 1021 AATATGCTATTTGTGCTGCCATCTACTCTAGTAAACGA--CA-TATTAATACTAAC 1077
QY 1021 AATTAACAAATATGCTTCTACACAGTCTCCTGTACCGGCAATATGATCTCTACCAA 1080
DB 1078 TTTAAGAGTACTCTACAGCATGGGAGATATGATTTTACAGTATTTTCTACAGTGC 1137
QY 1081 TTTAAGCAGTATAGCAGACATCTTGAAGATATGATTTGCAATTTATTTTATGTTAGT 1140
DB 1138 AAAATACCTTAAGTGCAGACGCTATGACATACATATCTATGATTTTCTACATTTTGG 1197
QY 1141 ACTATTAATTAAGTGCAGACGCTATGATGCTTATGATGATGATGATGATGATGATGAT 1200
DB 1198 GAGGAGTGAATTTTGTCTACACCTCCCGAGAGGACACTGAGAGATCTTATAGG 1257
QY 1201 GAGGAGTGAATTTTGTGCTCCCGGCACTACTAGTTTGTGATGATGATGATGATGAT 1260
DB 1258 TTTGATACATCCGAGCAATGCTTGTCAAAAACATACACCTCCGACCACTTAAAGAT 1317
QY 1261 TTTGATACATCTGTTGCTTACCTGTCAAAAGATGCTGACCAAGCTGAAAATAGGAT 1320
DB 1318 CCCCTTAATAATACACTTTTGGGAGTAAATTTAAAGAAAAGTTTCTGCAACCTA 1377
QY 1321 CCCCTTAATAATAGTAAAGTTTGGATTTGATTTAAAGAAAAGTTTCTTGTGACTTA 1380
DB 1378 GATCAGTTCTTGTAGGAGCGCAATTTTACTACAGCAGGATG 1422
QY 1381 GATCAGTATCCCTTGGAGGTAATTTTGTGAGGCTGATG 1425

RESULT 8
ID US-08-641-570-1 STANDARD; DNA; UNC; 1518 BP.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 1, Application US/08641570.
CC Sequence 1, Application US/08641570
CC GENERAL INFORMATION:
CC APPLICANT: Durst, Matthias
CC APPLICANT: Gissman, Lutz
CC TITLE OF INVENTION: A DNA SEQUENCE ENCODING A PAPILLOMAVIRUS
CC TITLE OF INVENTION: L1 PROTEIN CAPABLE OF EFFICIENTLY FORMING VIRUS-L1
KE
CC TITLE OF INVENTION: PARTICLES
CC NUMBER OF SEQUENCES: 6

CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Birch, Stewart, Kolasch & Birch, LLP
CC STREET: P.O. Box 747
CC CITY: Falls Church
CC STATE: Virginia
CC COUNTRY: USA
CC ZIP: 22040-0747
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: PatentIn Release #1.0, Version #1.30
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/641,570
CC FILING DATE:
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: US 08/092,528
CC FILING DATE: 16-JUL-1993
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Svensson, Leonard R.
CC REGISTRATION NUMBER: 30330
CC REFERENCE/DOCKET NUMBER: 147-133P
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 703-205-8000
CC TELEFAX: 703-205-8050
CC INFORMATION FOR SEQ ID NO: 1:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 1518 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: not relevant
CC TOPOLOGY: not relevant
CC MOLECULE TYPE: DNA (genomic)
CC HYPOTHEICAL: NO
CC ORIGINAL SOURCE:
CC INDIVIDUAL ISOLATE: HPV16
CC FEATURE:
CC NAME/KEY: CDS
CC LOCATION: 1..1518
CC Sequence 1518 BP; 488 A; 292 C; 285 G; 453 T; 0 other;
SQ
Query Match 34.3%; Score 522; DB 67; Length 1518;
Best Local Similarity 68.8%; Pred. No. 0.00e+00;
Matches 981; Conservative 0; Mismatches 441; Indels 3; Gaps 2;
DB 1 ATGCTCTTTGGCTGCCAGTGAAGGCGCACCTGTACTTGCTCCTGTCGCCAGTATCTAG 60
QY 1 ATGCTCTTTGGCTGCCAGTGAAGGCGCACCTGTACTTGCTCCTGTCGCCAGTGAAGG 60
DB 61 GTTGAAGCAGGAGATATGTTGACAGCAAAACATATATTAATCATGACGAGAACATCC 120
QY 61 GTTGAATTAAGTATGATATGCTGACGCAACGATATTTTATCATGCTGGGAGCTCT 120
DB 121 AGACTTGTGAGTGAATCCTATTTTCTTATTAATAAACCTAACATACAAATA 180
QY 121 AGATTAATTAAGTGTGTAATCCATATTTAGGTTCTGCAAGGTGGCAATAAGCAG 180
DB 181 TTAGTTCCTTAAGTATCAGATTAACAATACAGGATTTAATAATCATTTACCTGACCCC 240
QY 181 GATATTCCTTAAGTGTGCAATACCAATATAGAGTATTTGGGTGCAATTCCTGACCCA 240
DB 241 AATAAGTTGGTTTCCGACACCTCATTTTATATCCAGATACACAGCGGCTGTTGG 300
QY 241 AATAATTTGGTTTCCGATATATAGTATTTATATCTGAAACACACGTTAGTGTG 300
DB 301 GCGTGTAGTGTGAGTGAAGTGTGTTGAGCCATTAGGTGTGGCATTAGTGGCAT 360
QY 301 GCGTGTAGTGTGAGTGAAGTGTGTTGAGCCATTAGGTGTGGCATTAGTGGCAT 360
DB 361 CCTTATTAATAATTAAGTGAACAGCAAAATGCTAGTGTATGACGAAATGACAGT 420
QY 361 CCTTATTAATAATTAAGTGAACAGTGAAGTTCATGCCGCTAGCTTAATGTTCT 420


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QY 241 AATAATTGTTTACCGTATATATATTAATCCTGAAACACACGTTAGTGG 300
Db 301 GCCTGTGTGTGTAGTGTAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 360
QY 301 GCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 360
Db 361 CCTTATTAATTAATTTGATGACACAGAAATGCTAGTGTGTGTGTGTGTGTGT 420
QY 361 CATTATTAATTAATTTGATGACACAGAAATGCTAGTGTGTGTGTGTGTGTGT 420
Db 421 GTGATTAATTAATTTGATGACACAGAAATGCTAGTGTGTGTGTGTGTGTGT 480
QY 421 GAGGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 480
Db 481 TGCACACACCTATATGAGGACACACTGTGGGCAAGATGCCCATGTATGTG 540
QY 481 TGTGCCCCCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
Db 541 AATCCAGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
QY 541 TACACAGGCGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
Db 601 GTTGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
QY 601 GTAGATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
Db 661 CCACTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 720
QY 661 CATTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 720
Db 721 CCATATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 780
QY 721 CCTTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 780
Db 781 TTTAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 840
QY 781 TGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 840
Db 841 GGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 900
QY 841 GGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 900
Db 901 ACCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 960
QY 901 ACCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 960
Db 961 AATGCAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1020
QY 961 AATGCAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1020
Db 1021 AATATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1077
QY 1021 AATATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1077
Db 1078 TTTAAGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1137
QY 1078 TTTAAGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1137
Db 1081 TTTAAGCAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1140
QY 1081 TTTAAGCAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1140
Db 1138 AATAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1197
QY 1138 AATAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1197
Db 1198 GAGGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1257
QY 1198 GAGGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1257
Db 1201 GAGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1260
QY 1201 GAGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1260
Db 1258 TTTGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1317
QY 1258 TTTGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1317
Db 1261 TTTGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1320
QY 1261 TTTGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1320
Db 1318 CCGCTTAAATTAATTTGAGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1377
QY 1318 CCGCTTAAATTAATTTGAGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1377
Db 1321 CCGCTTAAATTAATTTGAGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1380
QY 1321 CCGCTTAAATTAATTTGAGGATGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1380

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Db 1378 GATCAGTTCCTTTAGGACCAATTTTACTACAGCAGATTG 1422
QY 1381 GATCAATATCCCTTGGACGTAATTTTGTTCAGGCTGATTG 1425

RESULT 10
ID US-08-472-673-2 STANDARD; DNA; UNC; 1517 BP.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 2, Application US/08472673.
CC Sequence 2, Application US/08472673
CC GENERAL INFORMATION:
CC APPLICANT: Lowy, Douglas R.
CC APPLICANT: Schiller, John T.
CC APPLICANT: Kirnbauer, Reinhard
CC TITLE OF INVENTION: SELF-ASSEMBLING RECOMBINANT
CC TITLE OF INVENTION: PAPILLOMAVIRUS CAPSID PROTEINS
CC NUMBER OF SEQUENCES: 6
CC CORRESPONDENCE ADDRESS:
CC ADDRESS: KNOBBE, MARTENS, OLSON & BEAR
CC STREET: 620 Newport Center Drive, Sixteenth Floor
CC CITY: Newport Beach
CC STATE: CA
CC COUNTRY: USA
CC ZIP: 92660
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/472,673
CC FILING DATE: 07-JUN-1995
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: US 08/032,869
CC FILING DATE: 16-MAR-1993
CC APPLICATION NUMBER: US 07/941,371
CC FILING DATE: 03-SEP-1992
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Kirkpatrick Ph.D., Anita M.
CC REGISTRATION NUMBER: 32,617
CC REFERENCE/DOCKET NUMBER: NIH032.001CP1
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 619-235-8550
CC TELEFAX: 619-235-0176
CC INFORMATION FOR SEQ ID NO: 2:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 1517 base pairs
CC TYPE: nucleic acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: DNA (genomic)
CC HYPOTHEICAL: NO
CC ANTI-SENSE: NO
CC FEATURE:
CC NAME/KEY: CDS
CC LOCATION: 1..1517
CC Sequence 1517 BP; 487 A; 291 C; 286 G; 453 T; 0 other:

Query Match 33.1%; Score 504; DB 63; Length 1517;
Best Local Similarity 68.2%; Pred. No. 0.00e+00;
Matches 972; Conservative 0; Mismatches 450; Indels 3; Gaps 2;

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Matches 972; Conservative 0; Mismatches 450; Indels 3; Gaps 2;

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Db 1 AATGCTCTTGGCTGGCTAGTGAAGCCACTGCTACTTGGCTTCTCCAGATTAAG 60
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Qy 1 AATGCTCTTGGCTGGCTAGTGAAGCCACTGCTACTTGGCTTCTCCAGATTAAG 60
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 61 GTTGAAGCAGGATGATATGTTGGACGACAAACATATATATCATGAGGAATCC 120
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 61 GTTGAAGCAGGATGATATGTTGGACGACAAACATATATATCATGAGGAATCC 120
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 121 AGACTACTGTCAGTTGGACATCCCTATTTTCCATTTAAAAAACCATAAACAATA 180
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 121 AGACTACTGTCAGTTGGACATCCCTATTTTCCATTTAAAAAACCATAAACAATA 180
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 181 TTAAGTCCCTAAAGATCAGAGATTACATACAGGGATTTTGAATACATTTACCTGACCC 240
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 181 TTAAGTCCCTAAAGATCAGAGATTACATACAGGGATTTTGAATACATTTACCTGACCC 240
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 241 AATTAAGTTGGTTTCCCTACACCTCATTTTAAATCCAGATACAGAGGGCTGGTTGG 300
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 241 AATTAAGTTGGTTTCCCTACACCTCATTTTAAATCCAGATACAGAGGGCTGGTTGG 300
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Db 301 GCGCTGTAGTGTGTTGAGTAGTGTGGTGCAGCCATAGTGTGGGCAATTAAGTGCAT 360
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 301 GCGCTGTAGTGTGTTGAGTAGTGTGGTGCAGCCATAGTGTGGGCAATTAAGTGCAT 360
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Db 361 CCTTATTAATTAATTAATGATGACACAGAAATGCTAGTGTGCTTATGACAGCAATG 420
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 361 CCTTATTAATTAATTAATGATGACACAGAAATGCTAGTGTGCTTATGACAGCAATG 420
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 421 GTGGATAATAGAGATATCTATCTATGATTTACAAACAACAACATTTGTTAATGGT 480
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Qy 421 GTGGATAATAGAGATATCTATCTATGATTTACAAACAACAACATTTGTTAATGGT 480
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Db 481 TCAACAACCACTATAGGAGAACACATGGGCAAGATCCCATGTCATGTTGTCAGTA 540
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Qy 481 TCAACAACCACTATAGGAGAACACATGGGCAAGATCCCATGTCATGTTGTCAGTA 540
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Db 541 TGGGCCCCGCTGATTTGGGACACCTGGGCTAAAGGACATGCTTGAATCCGCTTTTA 540
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Qy 541 TGGGCCCCGCTGATTTGGGACACCTGGGCTAAAGGACATGCTTGAATCCGCTTTTA 540
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Db 541 AATTCAGTGTGATTTCCACCATTAGAGTTAATTAACACAGATTTTCAAGATGATG 600
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Qy 541 AATTCAGTGTGATTTCCACCATTAGAGTTAATTAACACAGATTTTCAAGATGATG 600
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Db 541 TCACAGGCGGATGCCCCCTTTAGAACTTAAGAACACAGTTTGGAGATGATGATG 600
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Qy 541 TCACAGGCGGATGCCCCCTTTAGAACTTAAGAACACAGTTTGGAGATGATGATG 600
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Db 601 GTTATAGCGGCTTTGGCTATGAGCTTACTACATTTACAGGCTACAAAGATGAAT 660
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Qy 601 GTTATAGCGGCTTTGGCTATGAGCTTACTACATTTACAGGCTACAAAGATGAAT 660
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Db 601 GTATGATCTGATGATGTCCTAGGACTTTAGTACATGCTAATGATGAGGTA 660
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 601 GTATGATCTGATGATGTCCTAGGACTTTAGTACATGCTAATGATGAGGTA 660
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Db 661 CCACCTGATATTTGATCATCTATTTGCAAAATCCAGATTAATTAATTAATGATG 720
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 661 CCACCTGATATTTGATCATCTATTTGCAAAATCCAGATTAATTAATTAATGATG 720
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Db 661 CCATTTGATATTTGTCAGTCTATTTTAAATATCTGATTTATTTACAAATGTCAGAT 720
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Qy 661 CCATTTGATATTTGTCAGTCTATTTTAAATATCTGATTTATTTACAAATGTCAGAT 720
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Db 721 CCATATGGCAGACGCTTATTTTAAATTAACGAGGAAACAATTTGTTAGACATTTA 780
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Qy 721 CCATATGGCAGACGCTTATTTTAAATTAACGAGGAAACAATTTGTTAGACATTTA 780
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 721 CCATATGGGAGATTCATGTTTCTTACGACGAGAGAGCTTTTGTGTAGCATTTT 780
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 721 CCATATGGGAGATTCATGTTTCTTACGACGAGAGAGCTTTTGTGTAGCATTTT 780
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 781 TTTAATAGGGGCTGCTGCTGTGTAATGTCACGAGCATTTATACATTAAGGCTCT 840
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Qy 781 TTTAATAGGGGCTGCTGCTGTGTAATGTCACGAGCATTTATACATTAAGGCTCT 840
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Db 781 TGAATAGGGGAGTACTATGCTGACACTGCCCAATCCTTATATATTAAGGCACA 840
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 781 TGAATAGGGGAGTACTATGCTGACACTGCCCAATCCTTATATATTAAGGCACA 840
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 841 GGGCTACTGCAAAATTTAGCAGATTCAAATTTATTTCTACACCTAGTGGTGTATGTT 900
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 841 GGGCTACTGCAAAATTTAGCAGATTCAAATTTATTTCTACACCTAGTGGTGTATGTT 900
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 841 GGTATCGGCTGCTTACCTGCGAGCTGTGTATTTCTCCCTCCAGAGCTCTATTTGTT 900
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Qy 841 GGTATCGGCTGCTTACCTGCGAGCTGTGTATTTCTCCCTCCAGAGCTCTATTTGTT 900
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Db 901 ACCCTGATGCCCAATTAATTAACCTTATTTGTTACACAGCAGAGGCCCAAT 960
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Qy 901 ACCCTGATGCCCAATTAATTAACCTTATTTGTTACACAGCAGAGGCCCAAT 960
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Db 901 ACCCTGACTCCAGATGTTTAAATTAACCATTTGTTACATTAAGGCAGAGGCTATAC 960
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Qy 901 ACCCTGACTCCAGATGTTTAAATTAACCATTTGTTACATTAAGGCAGAGGCTATAC 960
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Db 961 AATGCAATTTGTTGGGATTAACCACTATTTGTTACTGTTTATCTACAGCAGTACA 1020
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Qy 961 AATGCAATTTGTTGGGATTAACCACTATTTGTTACTGTTTATCTACAGCAGTACA 1020
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Db 961 AATGATATCTGCTGATATATCAATTAATTTGTTAGTGTATACCTCTAGTACC 1020
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Qy 961 AATGATATCTGCTGATATATCAATTAATTTGTTAGTGTATACCTCTAGTACC 1020
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Db 1021 AATATGCTATTAATGCTGCTGATATCTACTGAGAACTA--CA-TATAAATTAATAC 1077
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Qy 1021 AATATGCTATTAATGCTGCTGATATCTACTGAGAACTA--CA-TATAAATTAATAC 1077
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Db 1021 AATTTACATATATGCTCTTACACAGCTCTCTGCTAGCTGGGCAATATGATGTTACCAA 1080
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 1021 AATTTACATATATGCTCTTACACAGCTCTCTGCTAGCTGGGCAATATGATGTTACCAA 1080
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Db 1078 TTTAAGGATACCTACGACATGGGAGGAAATGATTTACATTTATTTTCACTGTGC 1137
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Qy 1081 TTTAAGCAGTAAAGCAGACATGTTGAAGAAATGATTTGACATTTATTTAGTATGT 1140
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1138 AAAATTAACCTTAAGTACGACATGTTGACATCATACATATCTATGTAATTTCCATTTTG 1197
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Qy 1141 ACTATTAATTTTACGACATGTTATGCTCTATTTATCATATGATTAAGAAAGCATTTT 1200
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Db 1198 GAGACATGGAATTTTGTCTACCACTCCCGGAGGACACATGAAATACTTAAGG 1257
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Qy 1201 GAGATTTGAATGTTGTGTCTCCCGGAGGACACATGAAATGTTGTTGATATATGAT 1260
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Db 1258 TTTGTAACCCAGCAATTTCTTGTCAAAAACATPACACTCCAGCCTTAAGAGATGAT 1317
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 1261 TTTGTAACCACTGTTGCTATCTGCTGTCAAAAAGATGCTGCACACGCTGAAATAGAT 1320
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1318 CCCCTTAAATAATPACACTTTTGGGAGATTAATTAAGGAAAGTTTCTGCACACCTA 1377
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Qy 1321 CCTATGATTAAGTTTAAAGTTTGGATGATGATTAAGGAAAGTTTCTTGGACTTA 1380
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Db 1378 GATCAGTTTCTTTAGGACGCAAAATTTTACTACAAAGCAGATTTG 1422
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Qy 1381 GATCATAATCCCCCTTGACGCTAAATTTTGTTCAGGCTGATG 1425
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RESULT 12
 ID US-08-316-2398-2 STANDARD; DNA; UNC; 7904 BP.
 AC xxxxxx
 DT 01-JAN-1900
 DE Sequence 2, Application US/08316239B.
 CC Sequence 2, Application US/08316239B
 CC GENERAL INFORMATION:
 CC APPLICANT: Wheeler, Cosette M.
 CC TITLE OF INVENTION: Methods and a Diagnostic Aid for
 CC TITLE OF INVENTION: Distinguishing a Subset of HPV that is Associated
 CC with an
 CC TITLE OF INVENTION: Increased Risk of Developing Cervical Dysplasia an
 CC d
 CC TITLE OF INVENTION: Cervical Cancer
 CC NUMBER OF SEQUENCES: 4
 CC CORRESPONDENCE ADDRESS:
 CC ADDRESSEE: Jagtiani & Associates
 CC STREET: 6126 Rocky Way Court
 CC CITY: Centreville
 CC STATE: VA
 CC COUNTRY: USA
 CC ZIP: 20120-3400
 CC COMPUTER READABLE FORM:
 CC MEDIUM TYPE: Floppy disk
 CC COMPUTER: IBM PC compatible
 CC OPERATING SYSTEM: PC-DOS/MS-DOS
 CC SOFTWARE: Patentin Release #1.0, Version #1.30
 CC CURRENT APPLICATION DATA:
 CC APPLICATION NUMBER: US/08/316,239B
 CC FILING DATE: 30-SEP-1994
 CC CLASSIFICATION: 435
 CC ATTORNEY/AGENT INFORMATION:
 CC NAME: Jagtiani, Ajay A.
 CC REGISTRATION NUMBER: 35,205
 CC REFERENCE/DOCKET NUMBER: UNNE-0001
 CC TELECOMMUNICATION INFORMATION:
 CC TELEPHONE: (703) 817-9453
 CC TELEFAX: (703) 803-9387
 CC INFORMATION FOR SEQ ID NO: 2:
 CC SEQUENCE CHARACTERISTICS:
 CC LENGTH: 7904 base pairs
 CC TYPE: nucleic acid
 CC STRANDEDNESS: double
 CC TOPOLOGY: circular
 CC MOLECULE TYPE: DNA (genomic)
 CC HYPOTHETICAL: NO

5Q Sequence 7904 BP: 2601 A; 1377 C; 1510 G; 2416 T; 0 other;
Query Match 32.9%; Score 502; DB 47; Length 7904;
Best Local Similarity 68.1%; Fred. No. 0.00e+00;
Matches 971; Conservative 0; Mismatches 451; Indels 3; Gaps 2;
Db 5637 ATGTCTTTGGCTGCTAGTACAGGCGACCTGTCTACTTGGCTCTCTCCAGTCTTAA 5696
OY 1 ATGGCTTTGGCGGCTAGTACAAATCCGATACCTTCCACCTCTCTCTGTGTGCAAGA 60
Db 5697 GTTGTAGACGAGTAATATGTTGCAGCGCAAAACATATATATATATGACAGAAATCC 5756
OY 61 GTTGTAAATAGTATGATATATGATCTGCGCAAGCATATTTATATGCTGGGAGCTCT 120
Db 5757 AGACTACTGTGAGTGGACATCCATTTTCTTATTAACCACTTAACAAATACAAATA 5816
OY 121 AGATTAATAGTATGATATGATCTGCGCAAGCATATTTATATGCTGGGAGCTCT 180
Db 5817 TTAGTCTTAAAGTATCAGATTAACATACAGGATTTAGAAATATATATCTGACGCC 5876
OY 181 GATATCCAAAGTCTCTGATACCAATATAGATATTTGCGGTGACAGTACCTGACCA 240
Db 5877 AATAAGTTGGTTTCTCTGACACCTCATTTTATATCCAGATACACAGGCGCTGTTGG 5936
OY 241 AATAATTTGGTTTACCTGATATATATTTATATCTGAAACAAAGCTTATGTTGG 300
Db 5937 GCTGTAGAGTGTAGAGTGTGAGTGTGCTGAGCATATAGTGTGGGCTATGAGGCGAT 5996
OY 301 GCTGTGCTGAGTGAATTTGGCGGTGCTGAGCTTTAGGTGTGGCTTATGCGGCAT 360
Db 5997 CCTTTTAAATATATGATGACAGCAAGAAATGCTAGTCTTATGACAGCAATGACGT 6056
OY 361 CCAATTTTAAATATATGATGACAGCAAGAAATGCTAGTCTTATGACAGCAATGACGT 420
Db 6057 GTGGAATATAGAGATGATATATGATGATGATGATGATGATGATGATGATGATGAT 6116
OY 421 GAGAGCTTAGAGACATGCTGTGATGATTTAAGCAGACAGATATGATTTTGGCG 480
Db 6117 TCGAACCACCTATAGGAGCACTGGGCAAGGATCCCATGTCACATGTTGACAT 6176
OY 481 TGTGCTGCTGATTTGGGAGCACTGGGCTAAGGACATGTTGTAATGCGGTCTTTA 540
Db 6177 AATCAGGTATGTCACCATTTAGATTAATTAACACAGTTATGAGATGCTGATATG 6236
OY 541 TCACAGGCGGATGCCCCCTTGAACCTTAAGAACACAGTTTGAAGATGCTGATATG 600
Db 6237 GTTCATATGCTGCTTGTGCTATGACCTTACTATACATTAAGGCTAACAAGATGAAGT 6296
OY 601 GTAGATACGTGATATGCTGATGACCTTACTATACATTAAGGCTAACAAGATGAAGT 660
Db 6297 CCACTGATATTTGATCATATTTGCAATATCCAGATTAATTAATATGATGCTGAGAA 6356
OY 661 CCAATGATATTTGATCATATTTGCAATATCCAGATTAATTAATATGATGCTGAGAT 720
Db 6357 CCATATGCGGACGCTATTTTATTTTACGAAAGGCAAAATGTTTGTAGACATTTA 6416
OY 721 CCTATGAGGATTTCCATGTTTCTTACGACGTGAGCGCTTTTCTAGGAGATTT 780
Db 6417 TTTAATAGGCGTGTAGTGTGGAATATGACAGCATTTATTAACCTTAAGAGGCT 6476
OY 781 TGAATATAGGCGGTAGTGTGGAATATGACAGCATTTATTAACCTTAAGAGGCA 840
Db 6477 GGGTCTACTGCAAAATTTAGCAGTTCAAATTTTCTTACACTGATGCTCTATGTT 6536
OY 841 GGTATGCTGCTTACCTGAGAGTGTGATTTCTTCTTCCCTCCAGTGGCTCTATGTT 900
Db 6537 ACCGTGATGCGCAAAATTTCAATTAACCTTATGTTTACAGAGCAAGGCGCAAT 6596
OY 901 ACCTGCTGCTCCAGTCTTTTAATTAACCATATGTTGTTAGTACAGAGCGGTATATAC 960
Db 6597 AATGCAATTTGGGTAGCAAAATTTGTTATGTTGTTGTTGTTGTTGTTGTTGTTGTT 6656
OY 961 AATGCTATCTGCTGCAATATCAATTTTCTTACTGTGTAATACCACTGCTATGATAC 1020

Db 6657 AATATGCTATATATGCTGCTGCAATCTCTACTGCAAACTA--CA-TATTAATACTATAC 6713
OY 1021 AATTTAACAATATATGCTGCTGCTGCAATCTCTACTGCAAACTA--CA-TATTAATACTATAC 1080
Db 6714 TTTAAGAGTCTACAGACATGGGAGGATATGATATTTATGATTTTATTTTCAAGTGTG 6773
OY 1081 TTTAAGAGTCTACAGACATGGGAGGATATGATATTTATGATTTTATTTTCAAGTGTG 1140
Db 6774 AAATATACCTTATGCTGACAGTGTATGATATATATATATATATATATATATATATAT 6833
OY 1141 ACTATATCTTATGCTGACAGTGTATGATATATATATATATATATATATATATATATAT 1200
Db 6834 GAGGACTGGAATTTTGTCTACAACTCCCGGAGGAGCAGCTAGAAATATATATATAG 6893
OY 1201 GAGGACTGGAATTTTGTCTACAACTCCCGGAGGAGCAGCTAGAAATATATATATAG 1260
Db 6894 TTTGTAAACCGAGCAATTTGCTGTCAAAACATACACCTTCCAGACCTTAAGAGATGAT 6953
OY 1261 TTTGTAAACCGAGCAATTTGCTGTCAAAACATACACCTTCCAGACCTTAAGAGATGAT 1320
Db 6954 CCCCCTAATAAATACCTTTTGTGAGTAAATTTAAGGAAAGTTTCTGACAGACTA 7013
OY 1321 CCTATGATTAAGTTAAAGTTTGTGAGTAAATTTAAGGAAAGTTTCTGACAGACTA 1380
Db 7014 GATCAGTTTCTTGTGAGGAGCAATTTTGTGAGTAAATTTAAGGAAAGTTTCTGACAGACTA 7058
OY 1381 GATCAGTTTCTTGTGAGGAGCAATTTTGTGAGTAAATTTAAGGAAAGTTTCTGACAGACTA 1425
RESULT 13
ID US-08-316-239B-1 STANDARD; DNA; UNC; 7904 BP.
AC xxxxxx
DT 01-JAN-1900
DE Sequence 1, Application US/08316239B.
CC Sequence 1, Application US/08316239B
CC GENERAL INFORMATION:
CC APPLICANT: Wheeler, Colette M.
CC APPLICANT: Palmer, Cheryl A.
CC TITLE OF INVENTION: Methods and a Diagnostic Aid for
CC with an
CC TITLE OF INVENTION: Increased Risk of Developing Cervical Dysplasia an
CC d
CC TITLE OF INVENTION: Cervical Cancer
CC NUMBER OF SEQUENCES: 4
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Jagtland & Associates
CC STREET: 6126 Rocky Way Court
CC CITY: Centreville
CC STATE: VA
CC COUNTRY: USA
CC ZIP: 20120-3400
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent Release #1.0, Version #1.30
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/316,239B
CC FILING DATE: 30-SEP-1994
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Jagtland, Ajay A.
CC REGISTRATION NUMBER: 35,205
CC REFERENCE/DOCKET NUMBER: UNNE-0001
CC TELEPHONE: (703) 817-9453
CC TELEFAX: (703) 803-9387
CC INFORMATION FOR SEQ ID NO: 1:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 7904 base pairs
CC TYPE: nucleic acid

STRANDEDNESS: double
 TOPOLOGY: circular
 MOLECULE TYPE: DNA (genomic)
 CC HYPOTHETICAL: NO
 CC Sequence 7904 Bp; 2601 A; 1377 C; 1509 G; 2417 T; 0 other;
 Query Match 32.9%; Score 502; DB 47; Length 7904;
 Best Local Similarity 68.1%; Pred. No. 0.00e+00;
 Matches 971; Conservative 0; Mismatches 451; Indels 3; Gaps 2;

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 1 ATGGCTTTGTGGCGCCAGTAGACAAATACCTTACCTCCAGCTCTCTGTGGCAGAA 60
 5697 GTTGAACACGAGATGATATGTTGACGACCAAAATATATATATGATGACGAACATCC 5756
 61 GTTGAATACAGATGATATGATGACGACCAACATATTTATATCATGCTGGCAGCTCT 120
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 5937 GCGCTGAGAGTGTGAGTAGTGGTGTGTCAGCATTAAGTGTGGGATATGTCGCAT 5996
 301 GCTGTGCTGGAGTGAATGGCGTGGCTGAGCCTTTTAGGTGGCTTATGGGAT 360
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 361 CCATTTTAAATATATGATGATGACACTGAAATTCCTGACCGCTACGCTAATGTTCT 420
 6057 GTGATTAATAGAAATGATATCTATGATTAACAAACAAACAAATGTTTAAATGGT 6116
 421 GAGGAGCTTAGGAGCAATGTCTGATATTAAGACACACAGTATATGATTTGGGC 480
 6117 TGCAACCAACCATATGAGGAAACACTGGGCAAGAGTCCCATGACCAATTTGCAGTA 6176
 481 TGTGCCCCCTGCTATTGGGAAACACTGGGCTAAAGGCACTGCTGTAATCCGCTCTTA 540
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 541 TCACAGGGGATTTGCCCTTTAAGACTTAAGAACACAGTTTGGAAAGATGCTATATG 600
 6237 GTTCATCTGCTTGTGCTATGAGCACTTACTACATACAGGCTAACAAAGTGAAGT 6296
 601 GTAGATACGTGATATGATGGCCATGACCTTAGTACATTCGAAGTAAATGTAGGTA 660
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 661 CCATTGGATATTTGACAGCTATTTGTAATTCCTGATATTACAAATGCTCAGAT 720
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 6537 ACCTGTGATGCCCAATATTTCAATAAAGCTTATGTTTCAAGGACACAGGCGACAT 6596
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6597 AATGCAATTTGTGGGATTAACCAATATTTGTTACTGTTGTTGATCTACACGACATCA 6656
 961 AATGATATCTGTGCAATTAACCAATATTTGTTACTGTTGTTGATCTACACGACATCA 1020
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 1021 AATTTAACAAATGTCCTTACACAGTCTCTGCTGACCTGGCAATATGATGCTACCAA 1080
 6714 TTTAAGAGTACTACAGAGTGGGAGAAATATGATTTTACAGTTTATTTTCACTGTC 6773
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 6954 CCCCTTAAATAATACCTTTTGGAGTAATTTAAAGAAAGTTTCTGACACCTA 7013
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 1381 GATCAATATCCCTTGGAGCTGAATTTTGGTTCAGCGCTGATG 1425

RESULT 14
 ID US-08-410-005-1 STANDARD; DNA; UNC; 7904 BP.
 AC xxxxxx
 DT 01-JAN-1900
 DE Sequence 1, Application US/08410005.
 CC Sequence 1, Application US/08410005
 CC GENERAL INFORMATION:
 CC APPLICANT: Hampel, Arnold
 CC APPLICANT: DiPaolo, Joseph
 CC APPLICANT: Slawski, Andrew M.
 CC APPLICANT: Galasinski, Scott C.
 CC TITLE OF INVENTION: HUMAN PAPILLOMA VIRUS INHIBITION BY A
 CC NUMBER OF SEQUENCES: 11
 CC CORRESPONDENCE ADDRESS:
 CC ADDRESS: Reising, Ethelington, Barnard, Perry & Milton
 CC STREET: P.O. Box 4390
 CC CITY: Troy
 CC STATE: MI
 CC COUNTRY: USA
 CC ZIP: 48099-9998
 CC COMPUTER RELEASABLE FORM:
 CC MEDIUM TYPE: Floppy disk
 CC COMPUTER: IBM PC compatible
 CC OPERATING SYSTEM: PC-DOS/MS-DOS
 CC SOFTWARE: Patentlin Release #1.0, Version #1.25
 CC CURRENT APPLICATION DATA:
 CC APPLICATION NUMBER: US/08/410,005
 CC FILING DATE: 21-MAR-1995
 CC CLASSIFICATION: 435
 CC PRIOR APPLICATION DATA:
 CC APPLICATION NUMBER: 08/242,665
 CC FILING DATE: 13-MAY-1994
 CC ATTORNEY/AGENT INFORMATION:
 CC NAME: Kohn, Kenneth I.
 CC REGISTRATION NUMBER: 30,955
 CC REFERENCE/DOCKET NUMBER: P-301 (NIU)
 CC TELECOMMUNICATION INFORMATION:
 CC TELEPHONE: (810) 689-3500

Query Match	32.98;	Score 502;	DB 40;	Length 7904;
Best Local Similarity	68.18;	Pred. No. 0.00e+00;		
Matches 971;	Conservative 0;	Mismatches 451;	Indels 3;	Gaps 2;

[illegible]

Search completed: Wed Sep 24 00:28:26 1997
Job time : 1354 secs.

MORSE
(TM)

Release 2.1D John F. Collins, Biocomputing Research Unit.
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm
Run on: Tue Sep 23 15:20:17 1997; MasPar time 6.15 Seconds
Tabular output not generated. 339.244 Million cell updates/sec

Title: >US-08-409-122-2
Description: (1-507) from US08409122.pep
Perfect Score: 3721
Sequence: 1 MALMRPSDNTVYLPFPVSVAR.....APSATTSKSPAKRVRVRARK 507

Scoring table: PAM 150
Gap 11

Searched: 45564 seqs, 4117656 residues

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: a-issued
1:51:2.52 3:53 4:54 5:55 6:56 7: PCT90 8: PCT91 9: PCT92
10: PCT93 11: PCT94 12: PCT95 13: PCT96

Statistics: Mean 33.493; Variance 150.658; scale 0.222

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	DB	ID	Description	Pred. No.
1	161	4.3	20	6	US-07-678-	Sequence 23, Applicati	9.65e-05
2	151	4.1	20	6	US-07-678-	Sequence 9, Applicatio	5.97e-04
3	137	3.7	20	6	US-07-678-	Sequence 27, Applicati	7.33e-03
4	136	3.7	20	6	US-07-678-	Sequence 24, Applicati	8.75e-03
5	134	3.6	20	6	US-07-678-	Sequence 8, Applicatio	1.25e-02
6	130	3.5	20	6	US-07-678-	Sequence 17, Applicati	2.51e-02
7	130	3.5	20	6	US-07-678-	Sequence 28, Applicati	2.51e-02
8	129	3.5	20	6	US-07-678-	Sequence 13, Applicati	2.99e-02
9	127	3.4	20	6	US-07-678-	Sequence 7, Applicatio	4.24e-02
10	126	3.4	20	6	US-07-678-	Sequence 18, Applicati	5.04e-02
11	124	3.3	20	6	US-07-678-	Sequence 33, Applicati	7.12e-02
12	123	3.3	20	6	US-07-678-	Sequence 19, Applicati	8.46e-02
13	119	3.2	20	6	US-07-678-	Sequence 4, Applicatio	1.68e-01
14	115	3.1	20	6	US-07-678-	Sequence 10, Applicati	3.31e-01
15	113	3.0	20	6	US-07-678-	Sequence 15, Applicati	4.64e-01
16	107	2.9	20	6	US-07-678-	Sequence 29, Applicati	1.26e+00
17	107	2.9	20	6	US-07-678-	Sequence 22, Applicati	1.26e+00
18	106	2.8	20	6	US-07-678-	Sequence 16, Applicati	1.49e+00
19	104	2.8	20	6	US-07-678-	Sequence 5, Applicatio	2.06e+00
20	104	2.8	20	6	US-07-678-	Sequence 32, Applicatio	2.06e+00
21	103	2.8	20	6	US-07-678-	Sequence 20, Applicati	2.43e+00
22	102	2.7	20	6	US-07-678-	Sequence 3, Applicatio	2.86e+00

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23	101	2.7	117	6	US-07-942- Sequence 34, Applicati
24	101	2.7	117	6	US-07-942- Sequence 32, Applicati
25	99	2.7	117	6	US-07-942- Sequence 38, Applicati
26	98	2.6	20	6	US-07-678- Sequence 12, Applicati
27	97	2.6	117	10	PCT-US93-0 Sequence 6,39e+00
28	97	2.6	117	4	US-07-958- Sequence 3, Applicatio
29	97	2.6	243	10	PCT-US93-0 Sequence 2, Applicatio
30	97	2.6	243	4	US-07-958- Sequence 2, Applicatio
31	94	2.5	20	6	US-07-678- Sequence 14, Applicati
32	93	2.5	461	8	PCT-US91-0 Sequence 75, Applicati
33	92	2.5	1018	10	PCT-US93-1 Sequence 36, Applicati
34	91	2.4	634	3	US-07-779- Sequence 3, Applicatio
35	89	2.4	634	3	US-08-080- Sequence 3, Applicatio
36	89	2.3	122	12	PCT-US95-0 Sequence 27, Applicati
37	87	2.3	346	5	US-08-276- Sequence 5, Applicatio
38	86	2.3	408	5	US-08-555- Sequence 4, Applicatio
39	86	2.3	408	4	US-08-127- Sequence 4, Applicatio
40	86	2.3	648	6	US-08-185- Sequence 2, Applicatio
41	86	2.3	648	6	US-08-185- Sequence 4, Applicatio
42	86	2.3	648	6	US-08-185- Sequence 1, Applicatio
43	86	2.3	648	6	US-08-185- Sequence 5, Applicatio
44	86	2.3	648	5	US-08-276- Sequence 2, Applicatio
45	86	2.3	648	5	US-08-276- Sequence 2, Applicatio

ALIGNMENTS

Sequence 23, Application US/07678974D.

Sequence 23, Application US/07678974D

Patent No. 5629146

GENERAL INFORMATION:

APPLICANT: DILLNER, JOAKIM

APPLICANT: DILLNER, LENA

TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS

NUMBER OF SEQUENCES: 67

CORRESPONDENCE ADDRESS:

ADDRESSEE: BERMAN & AISENBERG

STREET: 1730 RHODE ISLAND AVENUE, N.W.,

CITY: WASHINGTON

STATE: D.C.

COUNTRY: U.S.A.

ZIP: 20036-3186

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/678,974D

FILING DATE: 25-JUN-1991

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: AISENBERG, Irwin M.

REGISTRATION NUMBER: 19,007

REFERENCE/DOCKET NUMBER: SG19171

TELECOMMUNICATION INFORMATION:

TELEPHONE: 202-293-1404

TELEFAX: 202-872-0493

TELEX: 440 069 AIS UI

INFORMATION FOR SEQ ID NO: 23:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 amino acids

TYPE: amino acid

TOPOLOGY: linear

SO SEQUENCE 20 AA; 2446 MW; 1749 CN;
Query Match 4.3%; Score 161; DB 6; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.65e-05;
Matches 17; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
Db 1 IENKPYLORAGHNCICW 20
:|||||:|||||
QY 306 IENKPYLHKAQHNCICW 325

RESULT 2 STANDARD; PRT; 20 AA.
ID US-07-678-974D-9
XX xxxxxx
AC
DT 01-JAN-1900
DE Sequence 9, Application US/07678974D.
CC Sequence 9, Application US/07678974D.
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC APPLICANT: DILLNER, LENA
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: S619171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 9:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2124 MW; 2356 CN;

Query Match 4.1%; Score 151; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 5.97e-04;
Matches 18; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 1 ORLVNACVGEVGRGCP1V 20
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QY 96 ORLVNACAGVEIGRGP1V 115

RESULT 3 STANDARD; PRT; 20 AA.
ID US-07-678-974D-27
XX xxxxxx
AC
CC

DT 01-JAN-1900
XX Sequence 27, Application US/07678974D.
DB Sequence 27, Application US/07678974D.
XX Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC APPLICANT: DILLNER, LENA
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: S619171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 27:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2370 MW; 2153 CN;

Query Match 3.7%; Score 137; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 7.33e-03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 1 HGEYDLPFIFOLCKITLTA 20
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QY 367 HGEYDLPFIFOLCKITLTA 386

RESULT 4 STANDARD; PRT; 20 AA.
ID US-07-678-974D-24
XX xxxxxx
AC
DT 01-JAN-1900
DE Sequence 24, Application US/07678974D.
DB Sequence 24, Application US/07678974D.
XX Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC APPLICANT: DILLNER, LENA
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC

CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 24:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC SEQUENCE 20 AA; 2211 MW; 2780 CN;
SQ

Query Match 3.7%; Score 136; DB 6; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.75e-03;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Db 1 NGICWGNLFVTVVDTTRST 20
QY 321 NGICWGNLFVTVVDTTRST 340

RESULT 5
ID US-07-678-974D-8 STANDARD; PRT; 20 AA.
XX xxxxxx
AC
XX
XX
DT 01-JAN-1900
DE Sequence 8, Application US/07678974D.
XX
CC Sequence 8, Application US/07678974D
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC APPLICANT: DILLNER, LENA
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC TITLE OF INVENTION:
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 17:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC SEQUENCE 20 AA; 2302 MW; 2493 CN;
SQ

Query Match 3.5%; Score 130; DB 6; Length 20;
Best Local Similarity 84.2%; Pred. No. 2.51e-02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
Db 2 KSEVPIDICTSICKYDYI 20

CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 8:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC SEQUENCE 20 AA; 2433 MW; 2528 CN;
SQ

Query Match 3.6%; Score 134; DB 6; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.25e-02;
Matches 16; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
Db 1 NKEGPDTSFYNDPQRLYW 20
QY 81 NKEGPDTSFYNDPQRLYW 100

RESULT 6
ID US-07-678-974D-17 STANDARD; PRT; 20 AA.
XX xxxxxx
AC
XX
XX
DT 01-JAN-1900
DE Sequence 17, Application US/07678974D.
XX
CC Sequence 17, Application US/07678974D
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC APPLICANT: DILLNER, LENA
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC TITLE OF INVENTION:
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 17:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC SEQUENCE 20 AA; 2302 MW; 2493 CN;
SQ

Query Match 3.5%; Score 130; DB 6; Length 20;
Best Local Similarity 84.2%; Pred. No. 2.51e-02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
Db 2 KSEVPIDICTSICKYDYI 20

Wed Sep 24 09:33:20 1997

US-08-409-122-2.ra1

Page 4

Qy 217 KCEVPLDICOSICKYDYL 235

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1
|||||
217 KCEVPLDICOSICKYDYL 235

RESULT 7
ID US-07-678-974D-28 STANDARD; PRT: 20 AA.
AC xxxxxx
DE 01-JAN-1900
Sequence 28, Application US/07678974D.
CC Sequence 28, Application US/07678974D
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC FILING DATE: 25-JUN-1991
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 28:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2254 MW; 2488 CN;

Query Match 3.5%; Score 130; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 2,51e-02;
Matches 18; Conservative 2; Mismatches 0; Indels 0;

Db 1 ITLTDVMTYTHSMNSTLE 20
Qy 382 ITLTDVMTYTHSMNSTLE 401

RESULT 8
ID US-07-678-974D-13 STANDARD; PRT: 20 AA.
AC xxxxxx
DE 01-JAN-1900
Sequence 13, Application US/07678974D.
CC Sequence 13, Application US/07678974D
CC Patent No. 5629146
CC GENERAL INFORMATION:
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CC APPLICANT: DILLNER, JOAKIM
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 13:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2096 MW; 2265 CN;

Query Match 3.5%; Score 129; DB 6; Length 20;
Best Local Similarity 65.0%; Pred. No. 2,99e-02;
Matches 13; Conservative 6; Mismatches 1; Indels 0;

Db 1 LCILGCKPPIGEHMGKSPC 20
Qy 156 LCILGCKPPIGEHMGKSPC 175

RESULT 9
ID US-07-678-974D-7 STANDARD; PRT: 20 AA.
AC xxxxxx
DE 01-JAN-1900
Sequence 7, Application US/07678974D.
CC Sequence 7, Application US/07678974D
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC OPERATING SYSTEM: PC-DOS/MS-DOS
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CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 7:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2392 MW; 2209 CN;

Query Match 3.4%; Score 127; DB 6; Length 20;
Best Local Similarity 75.0%; Pred. No. 4.24e-02;
Matches 15; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Db 1 SGLQYRFRHLPDPNKGFG 20
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QY 66 SAYQYRFRVQLDPNKGFL 85

RESULT 10
ID US-07-678-974D-18 STANDARD; PRT; 20 AA.
XX xxxxxx
DT 01-JAN-1900
DE Sequence 18, Application US/07678974D.
XX
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC APPLICANT: DILLNER, LENA
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESSES:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: floppy disk
CC OPERATING SYSTEM: IBM PC compatible
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 18:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids

CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2448 MW; 2764 CN;

Query Match 3.4%; Score 126; DB 6; Length 20;
Best Local Similarity 65.0%; Pred. No. 5.04e-02;
Matches 13; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Db 1 YPDYKMSPEPYGDSLFFYL 20
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QY 231 YPDYKMSADPYGDSMFCL 250

RESULT 11
ID US-07-678-974D-33 STANDARD; PRT; 20 AA.
XX xxxxxx
DT 01-JAN-1900
DE Sequence 33, Application US/07678974D.
XX
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC APPLICANT: DILLNER, LENA
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESSES:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: floppy disk
CC OPERATING SYSTEM: IBM PC compatible
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 33:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2218 MW; 1900 CN;

Query Match 3.3%; Score 124; DB 6; Length 20;
Best Local Similarity 80.0%; Pred. No. 7.12e-02;
Matches 16; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Db 1 SADLDQFPLGRKFLVQAGIR 20
|:|||||:|||||:
QY 457 SLDLDQFPLGRKFLVQAGIR 476

RESULT 12
ID US-07-678-974D-19 STANDARD; PRT; 20 AA.
XX

AC xxxxxx
XX
DT 01-JAN-1900
DE Sequence 19, Application US/07678974D.
XX
CC Sequence 19, Application US/07678974D.
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 19:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC
SQ SEQUENCE 20 AA; 2601 MW; 1679 CN;

Query Match 3.3%; Score 123; DB 6; Length 20;
Best Local Similarity 70.0%; Pred. No. 8.46e-02;
Matches 14; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Db 1 LFFYLRRQMFVYRHLFNRRAG 20
QY 246 MFQCLRRQQLFARHFWNRAG 265

RESULT 13
ID US-07-678-974D-4 STANDARD; PRT; 20 AA.
AC xxxxxx
XX
DT 01-JAN-1900
DE Sequence 4, Application US/07678974D.
XX
CC Sequence 4, Application US/07678974D
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG

CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.

SQ SEQUENCE 20 AA; 2246 MW; 2412 CN;

Query Match 3.2%; Score 119; DB 6; Length 20;
Best Local Similarity 70.0%; Pred. No. 1.58e-01;
Matches 14; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Db 1 VVSTDEYVARTNTYHAGTS 20
QY 21 VVNTDDYVTRTSIFYHAGSS 40

RESULT 14
ID US-07-678-974D-10 STANDARD; PRT; 20 AA.
AC xxxxxx
XX
DT 01-JAN-1900
DE Sequence 10, Application US/07678974D.
XX
CC Sequence 10, Application US/07678974D
CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.

CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 10:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2103 MW; 2050 CN;

Query Match 3.1%; Score 115; DB 6; length 20;
Best Local Similarity 85.0%; Pred. No. 3.31e-01;
Matches 17; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

DB 1 OPLGVGSGHPLNKLDDTE 20
|||||:||||:|||||
QY 111 OPLGVGSLSGHPFNKLDTE 130

RESULT 15
ID US-07-678-974D-15 STANDARD; PRT; 20 AA.
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AC xxxxxx
XX 01-JAN-1900
DE Sequence 15, Application US/07678974D.
XX

CC Patent No. 5629146
CC GENERAL INFORMATION:
CC APPLICANT: DILLNER, JOAKIM
CC APPLICANT: DILLNER, LENA
CC TITLE OF INVENTION: METHOD FOR DETECTION OF HUMAN PAPILLOMAVIRUS
CC TITLE OF INVENTION:
CC NUMBER OF SEQUENCES: 67
CC CORRESPONDENCE ADDRESSES:
CC ADDRESSEE: BERMAN & AISENBERG
CC STREET: 1730 RHODE ISLAND AVENUE, N.W.,
CC CITY: WASHINGTON
CC STATE: D.C.
CC COUNTRY: U.S.A.
CC ZIP: 20036-3186
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/07/678,974D
CC FILING DATE: 25-JUN-1991
CC CLASSIFICATION: 435
CC ATTORNEY/AGENT INFORMATION:
CC NAME: AISENBERG, Irwin M.
CC REGISTRATION NUMBER: 19,007
CC REFERENCE/DOCKET NUMBER: SG19171
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 202-293-1404
CC TELEFAX: 202-872-0493
CC TELEEX: 440 069 AIS UI
CC INFORMATION FOR SEQ ID NO: 15:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 20 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
SQ SEQUENCE 20 AA; 2196 MW; 2338 CN;

Query Match 3.0%; Score 113; DB 6; length 20;
Best Local Similarity 75.0%; Pred. No. 4.64e-01;
Matches 15; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

DB 1 PPLELINTYIODGDVYHGF 20
|||||:||||:|||||
QY 186 PPLELKNIVLEDDGDVYDTGY 205

Search completed: Tue Sep 23 15:20:52 1997
Job time : 35 secs.

MORSE
(TM)

Release 2.1D John F. Collins, Biocomputing Research Unit.
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Distribution rights by IntelliGenetics, Inc.

MPSrch_pp protein - protein database search, using Smith-Waterman algorithm
Run on: Tue Sep 23 15:21:11 1997; MasPar time 31.81 Seconds
Tabular output not generated. 355.718 Million cell updates/sec

Title: >US-08-409-122-2
Description: (1-507) from US08409122.pep
Perfect Score: 3721
Sequence: 1 MALMRPSDNTVYLPPEPSVAR.....APSATTSSKPAKRVRRARK 507

Scoring table:
PAM 150
Gap 11

Searched: 221846 seqs, 22315439 residues

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: a-pending
1:PCN91 2:PCY92 3:PCY93 4:PCY94 5:PCY95 6:PCY96 7:PCY97
8:U73 9:U76 10:U77 11:U772 12:U781 13:U782 14:U791
15:U792 16:U800 17:U801 18:U802 19:U803 20:U804 21:U805
22:U806 23:U807 24:U808 25:U809 26:U810 27:U811 28:U812
29:U813 30:U814 31:U815 32:U816 33:U817 34:U818 35:U819
36:U820 37:U821 38:U822 39:U823 40:U824 41:U825 42:U826
43:U827 44:U828 45:U829 46:U830 47:U831 48:U832 49:U833
50:U834 51:U835 52:U836 53:U837 54:U838 55:U839 56:U840
57:U841 58:U842 59:U843 60:U844 61:U845 62:U846 63:U847
64:U848 65:U849 66:U85 67:U86 68:U87 69:U88 70:U89
71:NEWP 72:NEWU 73:NEWU8

Statistics: Mean 34.713; Variance 146.689; scale 0.237

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description	Pred. No.
1	3721	100.0	507	56	US-08-409-Sequence 2, Applicatio	0.00e+00
2	3721	100.0	507	56	US-08-408-Sequence 2, Applicatio	0.00e+00
3	2616	70.3	505	67	US-08-641-Sequence 4, Applicatio	5.53e-248
4	2611	70.2	505	67	US-08-641-Sequence 2, Applicatio	1.73e-247
5	2547	68.4	532	73	US-08-737-Sequence 6, Applicatio	6.96e-183
6	1974	53.1	508	68	US-08-724-Sequence 1, Applicatio	5.69e-183
7	1863	50.1	503	68	US-08-724-Sequence 2, Applicatio	1.17e-171
8	417	11.2	93	40	US-08-247-Sequence 12, Applicati	1.04e-27
9	157	4.2	37	40	US-08-247-Sequence 14, Applicati	5.43e-04
10	137	3.7	21	14	US-07-949-Sequence 67, Applicati	2.38e-02
11	137	3.7	21	14	US-07-949-Sequence 67, Applicati	2.38e-02
12	118	3.2	22	40	US-08-247-Sequence 15, Applicati	7.60e-01
13	117	3.1	15	34	US-08-185-Sequence 40, Applicati	9.08e-01

RESULT	1	STANDARD:	PRT:	507	AA.
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AC	xxxxxx				
XX					
DT	01-JAN-1900				
XX					
DE	Sequence 2, Application US/08409122.				
XX					
CC	Sequence 2, Application US/08409122				
CC	GENERAL INFORMATION:				
CC	APPLICANT: JOYCE, JAMES G.				
CC	APPLICANT: GEORGE, HUGH A.				
CC	APPLICANT: HOFMANN, KATHRYN J.				
CC	APPLICANT: JANSEN, KATHRYN U.				
CC	APPLICANT: NEPPER, MICHAEL P.				
CC	TITLE OF INVENTION: DNA ENCODING HUMAN PAPILLOMAVIRUS TYPE 18 VACCINE				
CC	NUMBER OF SEQUENCES: 16				
CC	CORRESPONDENCE ADDRESS:				
CC	ADDRESSEE: CHRISTINE E. CARTY - MERCK & CO., INC.				
CC	STREET: 126 EAST LINCOLN AVENUE - P.O. BOX 2000				
CC	CITY: RAHWAY				
CC	STATE: NJ				
CC	COUNTRY: US				
CC	ZIP: 07065-0907				
CC	COMPUTER READABLE FORM:				
CC	MEDIUM TYPE: Diskette				
CC	COMPUTER: IBM Compatible				
CC	OPERATING SYSTEM: DOS				
CC	SOFTWARE: FASTEST Version 1.5				
CC	CURRENT APPLICATION DATA:				
CC	APPLICATION NUMBER: US/08/409,122				
CC	FILING DATE:				
CC	CLASSIFICATION: 435				
CC	PRIOR APPLICATION DATA:				
CC	APPLICATION NUMBER: 08/408,669				
CC	FILING DATE: 22-MAR-1995				

ALIGNMENTS

14	113	3.0	15	34	US-08-185-Sequence 34, Applicati	1.84e+00
15	112	3.0	15	34	US-08-185-Sequence 13, Applicati	2.19e+00
16	107	2.9	117	61	US-08-456-Sequence 20, Applicati	5.23e+00
17	107	2.9	117	45	US-08-292-Sequence 24, Applicati	5.23e+00
18	105	2.8	15	34	US-08-185-Sequence 19, Applicati	7.38e+00
19	104	2.8	15	34	US-08-185-Sequence 49, Applicati	8.76e+00
20	104	2.8	117	45	US-08-292-Sequence 18, Applicati	8.76e+00
21	104	2.8	117	61	US-08-456-Sequence 16, Applicati	8.76e+00
22	105	2.8	119	65	US-08-497-Sequence 20, Applicati	7.38e+00
23	104	2.8	119	65	US-08-497-Sequence 22, Applicati	8.76e+00
24	101	2.7	15	34	US-08-185-Sequence 28, Applicati	1.46e+01
25	101	2.7	15	34	US-08-185-Sequence 41, Applicati	1.46e+01
26	101	2.7	15	34	US-08-185-Sequence 35, Applicati	1.46e+01
27	101	2.7	15	34	US-08-185-Sequence 7, Applicatio	1.46e+01
28	99	2.7	15	34	US-08-185-Sequence 42, Applicati	2.04e+01
29	99	2.7	15	34	US-08-185-Sequence 36, Applicati	2.04e+01
30	102	2.7	118	48	US-08-326-Sequence 2, Applicatio	1.23e+01
31	101	2.7	118	45	US-08-292-Sequence 17, Applicati	1.46e+01
32	101	2.7	118	61	US-08-456-Sequence 15, Applicati	1.46e+01
33	101	2.7	119	13	US-07-895-Sequence 11, Applicati	1.46e+01
34	101	2.7	119	14	US-07-944-Sequence 11, Applicati	1.46e+01
35	101	2.7	119	12	US-07-812-Sequence 11, Applicati	1.46e+01
36	101	2.7	119	61	US-08-458-Sequence 11, Applicati	1.46e+01
37	101	2.7	138	13	US-07-895-Sequence 7, Applicatio	1.46e+01
38	101	2.7	138	61	US-08-458-Sequence 7, Applicatio	1.46e+01
39	101	2.7	138	12	US-07-812-Sequence 7, Applicatio	1.46e+01
40	101	2.7	138	14	US-07-944-Sequence 2, Applicatio	2.04e+01
41	99	2.7	966	66	US-08-571-Sequence 2, Applicatio	2.04e+01
42	98	2.6	15	34	US-08-185-Sequence 14, Applicati	2.41e+01
43	98	2.6	118	61	US-08-456-Sequence 19, Applicati	2.41e+01
44	98	2.6	118	45	US-08-292-Sequence 22, Applicati	2.41e+01
45	97	2.6	141	64	US-08-483-Sequence 12, Applicati	2.85e+01

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CC ATTORNEY/AGENT INFORMATION:
CC NAME: CARTY, CHRISTINE E.
CC REGISTRATION NUMBER: 36,099
CC REFERENCE/DOCKET NUMBER: 19425
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 908-594-6734
CC TELEFAX: 908-594-4720
CC
CC INFORMATION FOR SEQ ID NO: 2:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 507 amino acids
CC TYPE: amino acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: protein
CC HYPOTHEICAL: NO
CC ANTI-SENSE: NO
CC FRAGMENT TYPE: N-terminal
CC ORIGINAL SOURCE:
SQ SEQUENCE 507 AA; 56534 MW; 1382060 CN;

Query Match 100.0%; Score 3721; DB 56; Length 507;
Best Local Similarity 100.0%; Pred. No. 0.00e+00;
Matches 507; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 MALMRPSDNTVYLPSPSVARVNTDDVYRTSTIFYHAGSSRLTVGNPFYRVPAAGGNKQ 60
Oy 1 MALMRPSDNTVYLPSPSVARVNTDDVYRTSTIFYHAGSSRLTVGNPFYRVPAAGGNKQ 60
Db 61 DIRKSAVQYRFRVQQLPDPKKEGLPDNSIYNPETQRLVMACAGVEIGRGQPLVGLSGH 120
Oy 61 DIRKSAVQYRFRVQQLPDPKKEGLPDNSIYNPETQRLVMACAGVEIGRGQPLVGLSGH 120
Db 121 PFYNKLDLTDESSHAATSNVSEVDVNDVYKQTOCLIIIGCAPAIGEMHAKGTACKSRPL 180
Oy 121 PFYNKLDLTDESSHAATSNVSEVDVNDVYKQTOCLIIIGCAPAIGEMHAKGTACKSRPL 180
Db 121 PFYNKLDLTDESSHAATSNVSEVDVNDVYKQTOCLIIIGCAPAIGEMHAKGTACKSRPL 180
Oy 121 PFYNKLDLTDESSHAATSNVSEVDVNDVYKQTOCLIIIGCAPAIGEMHAKGTACKSRPL 180
Db 181 SOGDCPPELEKNTVLEDDGMDVDTGAGMDPSTLDTRKCEVPLDICKSYPTDLOMSAD 240
Oy 181 SOGDCPPELEKNTVLEDDGMDVDTGAGMDPSTLDTRKCEVPLDICKSYPTDLOMSAD 240
Db 241 PYGDSMFCLRRQQLFARHFNWAGMGDTVPQSLYIKGTGMRASPGSGSY 300
Oy 241 PYGDSMFCLRRQQLFARHFNWAGMGDTVPQSLYIKGTGMRASPGSGSY 300
Db 301 TSDSQLFNKPYWLKRAQHNGICWNNQLFVTVVDTTRSTNLTICASTQSPVPGQYDATK 360
Oy 301 TSDSQLFNKPYWLKRAQHNGICWNNQLFVTVVDTTRSTNLTICASTQSPVPGQYDATK 360
Db 361 FKQYSRHVEYDQLQFQLCTITLTADVNSYIHSNNSLTEDMNFVGPPTTSLVDIYR 420
Oy 361 FKQYSRHVEYDQLQFQLCTITLTADVNSYIHSNNSLTEDMNFVGPPTTSLVDIYR 420
Db 421 FVQSVAILTCQKDAAPAKNDKPYDLKFWNVDLKEKPSLDDQYPLGRKFLVQAGLRKPT 480
Oy 421 FVQSVAILTCQKDAAPAKNDKPYDLKFWNVDLKEKPSLDDQYPLGRKFLVQAGLRKPT 480
Db 481 IGPKRKAPSATSTSSPKAKRVVPAK 507
Oy 481 IGPKRKAPSATSTSSPKAKRVVPAK 507

RESULT 2
ID US-08-408-669-2 STANDARD: PRI: 507 AA.
XX
AC xxxxxx
XX
DT 01-JAN-1900
XX
DE Sequence 2, Application US/08408669.
XX
CC Sequence 2, Application US/08408669
CC GENERAL INFORMATION:
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CC APPLICANT: HOFMANN, KATHRYN J.
CC APPLICANT: JANSEN, KATHRYN U.
CC APPLICANT: NEPPER, MICHAEL P.
CC TITLE OF INVENTION: DNA ENCODING HUMAN PAPILLOMAVIRUS TYPE 18
CC NUMBER OF SEQUENCES: 16
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: CHRISTINE E. CARTY - MERCK & CO., INC.
CC STREET: 126 EAST LINCOLN AVENUE - P.O. BOX 2000
CC CITY: RAHWAY
CC STATE: NJ
CC COUNTRY: US
CC ZIP: 07065-0907
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Diskette
CC OPERATING SYSTEM: DOS
CC SOFTWARE: FASTSEQ Version 1.5
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/408,669
CC FILING DATE: 22-MAR-1995
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER:
CC FILING DATE:
CC ATTORNEY/AGENT INFORMATION:
CC NAME: CARTY, CHRISTINE E.
CC REGISTRATION NUMBER: 36,099
CC REFERENCE/DOCKET NUMBER: 19424
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 908-594-6734
CC TELEFAX: 908-594-4720
CC
CC INFORMATION FOR SEQ ID NO: 2:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 507 amino acids
CC TYPE: amino acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: protein
CC HYPOTHEICAL: NO
CC ANTI-SENSE: NO
CC FRAGMENT TYPE: N-terminal
CC ORIGINAL SOURCE:
SQ SEQUENCE 507 AA; 56534 MW; 1382060 CN;

Query Match 100.0%; Score 3721; DB 56; Length 507;
Best Local Similarity 100.0%; Pred. No. 0.00e+00;
Matches 507; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Dd	361	FQKSYRHHVEEDLQFIPLFCITTTTLTADVMSYIHSNNSIILEDWNFVGPPEPTTSLVDTYR	420
Qy	361	FQKSYRHHVEEDLQFIPLFCITTTTLTADVMSYIHSNNSIILEDWNGVPPEPTTSLVDTYR	420
Dd	421	FVQSVAITTCODDAAAEAKNDPYDKLFKNVNDLKESFSLDDOYPIGRKEFLVOAGIRRRPT	480
Qy	421	FVQSVAITTCODDAAAEAKNDPYDKLFKNVNDLKESFSLDDOYPIGRKEFLVOAGIRRRPT	480
Dd	481	IGPRKRSAFSATTSKKPAKRYRVRAK	507
Qy	481	IGPRKRSAFSATTSKKPAKRYRVRAK	507
RESULT	3	STANDARD;	PRT; 505 AA.
ID	US-08-641-570-4		
AC	xxxxxx		
XX			
DT	01-JAN-1900		
XX			
DE	Sequence 4, Application US/08641570.		
CC			
CC	Sequence 4, Application US/08641570		
CC	GENERAL INFORMATION:		
CC	APPLICANT: Dust, Matthias		
CC	TITLE OF INVENTION: A DNA SEQUENCE ENCODING A PAPILLOMAVIRUS		
CC	TITLE OF INVENTION: LI PROTEIN CAPABLE OF EFFICIENTLY FORMING VIRUS-L		
IKE			
CC	TITLE OF INVENTION: PARTICLES		
CC	NUMBER OF SEQUENCES: 6		
CC	CORRESPONDENCE ADDRESSES:		
CC	ADDRESSEE: Birch, Stewart, Kolasch & Birch, LLP		
CC	STREET: P.O. Box 747		
CC	CITY: Falls Church		
CC	STATE: Virginia		
CC	COUNTRY: USA		
CC	ZIP: 22040-0747		
CC	COMPUTER READABLE FORM:		
CC	MEDIUM TYPE: Floppy disk		
CC	COMPUTER: IBM PC compatible		
CC	OPERATING SYSTEM: PC-DOS/MS-DOS		
CC	SOFTWARE: PatentIn Release #1.0, Version #1.30		
CC	CURRENT APPLICATION DATA:		
CC	APPLICATION NUMBER: US/08/641,570		
CC	FILING DATE:		
CC	CLASSIFICATION: 435		
CC	PRIOR APPLICATION DATA:		
CC	APPLICATION NUMBER: US 08/092,528		
CC	FILING DATE: 16-JUL-1993		
CC	ATTORNEY/AGENT INFORMATION:		
CC	NAME: Svensson, Leonard R.		
CC	REGISTRATION NUMBER: 30330		
CC	REFERENCE/DOCKET NUMBER: 147-133P		
CC	TELECOMMUNICATION INFORMATION:		
CC	TELEPHONE: 703-205-8000		
CC	TELEFAX: 703-205-8050		
CC	INFORMATION FOR SEQ ID NO: 4:		
CC	SEQUENCE CHARACTERISTICS:		
CC	LENGTH: 505 amino acids		
CC	TYPE: amino acid		
CC	TOPOLOGY: linear		
CC	MOLECULE TYPE: protein		
CC	SEQUENCE 505 AA; 56308 MW; 1375030 CN;		
SQ			
Query Match	70.3%;	Score 2616;	DB 67; Length 505;
Best Local Similarity	65.7%;	Pred. No. 5,53e-248;	
Matches 329; Conservative	96;	Mismatches 74;	Indels 2; Gaps 2;
Dd	1	MSLWLPSEATYILPPVPSKYSTDIEYAKNIYYHAGSTRLLANGHPFPFKRNNTKI	60
Qy	1	MLMWPSPNTYILPPSVARVVNTDDYTTRISIFHAASSRLITGVNPFYRFVPAAGGNKO	60

D	b	61	LVPKVSGLQYRVERFIHLDPNPKFGFPDTSFYNPDPTRLVMACVGVENGROPLGVGISGH	120
O	y	61	DIKPVSAQYRVERFQQLDPNPKFGJPDNSIYNPEFQRLVMAAGVEIGROGPLGVGISGH	120
D	b	121	PLNKLDTENASAAANAAGVDNRECIEMDYKQYOLCLGCKPPRIGEMWGRGSPCTNVA	180
O	y	121	PFYNNLDTENSSHAATSVNSVDNRNVSVDYKQYOLCLGCAPALGEMWAGTKACKSRPL	180
D	b	181	NPGDPELLEINTVYQDSDMYDTGGADEFITLANKSEVPLDICTSICKYPDYIKWSE	240
O	y	181	SQGDCEPELEKNTVLEDDMYDTGGADEFITLDTCKCEVPLDICTSICKYPDYIOMASD	240
D	b	241	PYGDSLEFFYLREQMFVHLEFNRAAGTGVENYDDLYIKSGSTANLASSNYFPPTSGSMV	300
O	y	241	PYGDSMFELCAREQLEFANHFNNRAGTGWGDTYQSLYIKGTGMRASSPGSCSYSPSPSGSIV	300
D	b	301	TSDAOIFENKFPVWLQAOQHNNGICGNOLFVTVYVDTTSTYMSLCAALSTSETT-YKNTN	359
O	y	301	TSDSOLFENKFPVWLHKAQOHNNGICWHNOLFVTVYVDTTSTIMLTICASSQSQSPVPGDYATK	360
D	b	360	FREYRHOEEVDLQIFPOLCKITLADVMTYIHSNNSILDDMNPGLQPPGGTLLDYR	419
O	y	361	FKQSRHVEEDLQIFPOLCKITLADVMTYIHSNNSILDDMNPGLQPPGGTLLDYR	420
D	b	420	FVTSQAIAQCKHTPAPPEDEPLKTYTEVNLKEKFSADLDQFPLGRKFLQAGLKAPK	479
O	y	421	FVQSAVATTCQADAAEAENKDPYDKLKEFNVDLKEKFSADLDQYPLGRKFLVQAGLRKPT	480
D	b	480	FTLGRKRAKPTTSTSTTAKR	500
O	y	481	IG-PKRSAPSATSTSSPKAKR	500
RESULT		4		
ID		US-08-641-570-2	STANDARD;	PRT; 505 AA.
AC		xxxxxx		
XX		01-JAN-1900		
DT				
XX				
Sequence 2, Application US/08641570.				
CC		Sequence 2, Application US/08641570		
CC		GENERAL INFORMATION:		
CC		APPLICANT: Durst, Matthias		
CC		APPLICANT: Gissman, Lutz		
CC		TITLE OF INVENTION: A DNA SEQUENCE ENCODING A PAPILLOMAVIRUS		
CC		TITLE OF INVENTION: LI PROTEIN CAPABLE OF EFFICIENTLY FORMING VIRUS-L		
IRE				
CC		TITLE OF INVENTION: PARTICLES		
CC		NUMBER OF SEQUENCES: 6		
CC		CORRESPONDENCE ADDRESS:		
CC		ADDRESSEE: Birch, Stewart, Kolasch & Birch, LLP		
CC		STREET: P.O. Box 747		
CC		CITY: Falls Church		
CC		STATE: Virginia		
CC		COUNTRY: USA		
CC		ZIP: 22040-0747		
CC		COMPUTER READABLE FORM:		
CC		MEDIUM TYPE: Floppy disk		
CC		COMPUTER: IBM PC compatible		
CC		OPERATING SYSTEM: PC-DOS/MS-DOS		
CC		SOFTWARE: PatentIn Release #1.0, Version #1.30		
CC		CURRENT APPLICATION DATA:		
CC		APPLICATION NUMBER: US/08/641,570		
CC		FILING DATE:		
CC		CLASSIFICATION: 435		
CC		PRIOR APPLICATION DATA:		
CC		APPLICATION NUMBER: US 08/092,528		
CC		FILING DATE: 16-JUL-1993		
CC		ATTORNEY/AGENT INFORMATION:		
CC		NAME: Svensson, Leonard R.		
CC		REGISTRATION NUMBER: 30330		

CC REFERENCE/DOCKET NUMBER: 147-133P
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 703-205-8000
CC TELEFAX: 703-205-8050
CC INFORMATION FOR SEQ ID NO: 2:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 505 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC MOLECULE TYPE: Protein
SQ SEQUENCE 505 AA; 56292 MW; 1366834 CN;

Query Match 70.2%; Score 2611; DB 67; Length 505;
Best Local Similarity 65.3%; Pred. No. 1,786-247;
Matches 327; Conservative 98; Mismatches 74; Indels 2; Gaps 2;

Db 1 MSMLPSEATYLPVPVSKVSTDEYVARTNIYHAGTSRLAVGHPFKKPNKKI 60
QY 1 MALMPSDNTVLPSPSVARVNTDVTSTIFHAGSSRLTVGNPFYFVPAAGGNQ 60
Db 61 LVPVSGLYRFRILHDPNKGFPDTSFYNDTORLYMACVGVGQPLGVGISG 120
QY 61 DIPKSAVQYRFRVQLPBNKFGLPDMSIYNPETOQLYMACAGVEIGRQPLGVGISG 120
Db 121 PLNKLDDTENASAVANAGVNDRECSMDYKOTQLIGCKPPIGEHMGKSPCTNVAV 180
QY 121 PFYNNKDDTESHAATSNVSEEDVNDNVSVYKOTQLIGCAPAIGEHMAKGTACKSRPL 180
Db 181 NFGDCPPELEINTIIOGDMDVDTGFGAMDFTTLQAKSEVPLDICTICKYPIYKWE 240
QY 181 SQGDCPPELEKNTVLEDGMDVDTGAGMDFSTLQDKCEVPLDICTICKYPIYKMSAD 240
Db 241 PYGDSLPFYLRREOMFVRLHFRAGAVGVNPDLYTKSGSTANLASNFPFPGSNV 300
QY 241 PYGDSMFECRLRQQLFARHFNRACTMGDPVQSLYIKGTGRASPSCYSPSGSIV 300
Db 301 TSDAIFNKPYYLORAGGNHNCIGNQLFVYVDTTRSTNNISLAISSEET-YKNN 359
QY 301 TSDQLFNKPYYLHKAQGNHNCIGHNOLEFVYVDTTRSTNLTICASTQSPGVGOYDATK 360
Db 360 FKEYLRGGEYDLOTFOLCKTLTADVMYIHSNSTLLEPMNFGLOPPGCTLEDYTR 419
QY 361 FKQYSRHVEYDLOTFOLCKTLTADVMYIHSNSTLLEPMNFGVPPPTSLVDYTR 420
Db 420 FVTSQATACOKHTPPAKKEDPLKXTYEVYNLKEKSSADLDOFLGRKFTLQAGLAKPK 479
QY 421 FVQSVALTCKDAFAENKDPDKLKTGMVNDLKEKFLDDOYPLGRFLVQAGLRKPT 480
Db 480 FTLGKRAITPTISSTIAKR 500
QY 481 IG-PKRSAPSATTSSKPAKR 500

RESULT 5
ID US-08-737-336-6 STANDARD; PRI: 532 AA.

AC xxxxxx
DT 01-JAN-1900
DE Sequence 6, Application US/08737336.
CC Sequence 6, Application US/08737336
CC GENERAL INFORMATION:
CC APPLICANT: FRAZER, Ian
CC APPLICANT: ZHOU, Jian
CC TITLE OF INVENTION: RECOMBINANT PAPILLOMA VIRUS L1
CC NUMBER OF SEQUENCES: 6
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Foley & Lardner
CC STREET: 3000 K Street, N.W., Suite 500
CC CITY: Washington
CC STATE: D.C.

CC COUNTRY: USA
CC ZIP: 20007-5109
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patent in Release #1.0, Version #1.30
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/737,336
CC FILING DATE: 16-JAN-1997
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: WO PCT/AU95/00292
CC FILING DATE: 17-MAY-1995
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: AU PM 5667
CC FILING DATE: 17-MAY-1994
CC ATTORNEY/AGENT INFORMATION:
CC NAME: SAXE, Bernhard D.
CC REGISTRATION NUMBER: 28,665
CC REFERENCE/DOCKET INFORMATION: 65064/118
CC TELEPHONE: (202)672-5300
CC TELEFAX: (202)672-5399
CC TELEX: 904136
CC INFORMATION FOR SEQ ID NO: 6:
CC LENGTH: 532 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC MOLECULE TYPE: Protein
SQ SEQUENCE 532 AA; 59240 MW; 1539375 CN;

Query Match 68.4%; Score 2547; DB 73; Length 532;
Best Local Similarity 63.2%; Pred. No. 5,636-241;
Matches 321; Conservative 107; Mismatches 73; Indels 7; Gaps 6;

Db 31 KDMRPSDSTVYVPPNPVSKVATADAVYRTNIFHAGSSRLAVGHPYSIKRA--NK 88
QY 1 MALMPSDNTVLPSPSVARVNTDVTSTIFHAGSSRLTVGNPFYFVPAAGGNK 59
Db 89 TVPVSYGYQYRFRVQLPBNKFGLPDMSIYNPETOQLYMACAGVEIGRQPLGVGISG 148
QY 60 ODIPKSAVQYRFRVQLPBNKFGLPDMSIYNPETOQLYMACAGVEIGRQPLGVGISG 119
Db 149 HPELNKYDVENNS-GSGGNPGQDNRVNMGMDYKOTQLICAVGAPPLGSHMGKSGCTNTP 207
QY 120 HPEYNNKDDTESHAATSNVSEEDVNDNVSVYKOTQLIGCAPAIGEHMAKGTACKSRP 179
Db 208 VOAGDCPPELEINTIIOGDMDVDTGFGAMNFDLQTKNSDVPIDICGTCCKYPIYKMSAD 267
QY 180 LSGDCPPELEKNTVLEDGMDVDTGAGMDFSTLQDKCEVPLDICTICKYPIYKMSAD 239
Db 268 DRYGRLPEFELRREOMFVRLHFRAGAVGVNPDLYTKSGSTANLASNFPFPGSNV 327
QY 240 DRYGDSMFECRLRQQLFARHFNRACTMGDPVQSLYIKGTGRASPSCYSPSGSIV 299
Db 328 VSEAOFLNKPYYLORAGGNHNCIGNQLFVYVDTTRSTNNISLAISSEET-YKNN 385
QY 300 VTSQDLFNPYYLHKAQGNHNCIGHNOLEFVYVDTTRSTNLTICASTQSPGVGOYDATK 359
Db 386 DYKEYMRHVEYDLOTFOLCKTLTADVMYIHSNSTLLEPMNFGLOPPGCTLEDYTR 445
QY 360 KFKQYSRHVEYDLOTFOLCKTLTADVMYIHSNSTLLEPMNFGVPPPTSLVDYTR 419
Db 446 RYVQSVALTCKDAFAENKDPDKLKTGMVNDLKEKFLDDOYPLGRKFTLQAGLAKPK 505
QY 420 RYVQSVALTCKDAFAENKDPDKLKTGMVNDLKEKFLDDOYPLGRKFTLQAGLAKPK 479
Db 506 SIRTGVKR-PAVSKASAPKRAKTR 532
QY 480 TIGPKRSAPSATTSSKPAKR 507

RESULT	ID	US-08-724-281-1	STANDARD;	PRT;	508 AA.
XX	AC	xxxxxx			
XX	DT	01-JAN-1900			
XX	XX				
DE	Sequence 1, Application US/08724281.				
CC	Sequence 1, Application US/08724281				
CC	GENERAL INFORMATION:				
CC	APPLICANT: SCHLEGEL, C. Richard				
CC	APPLICANT: JENSON, A. Bennett				
CC	APPLICANT: GHIM, Shih-Je				
CC	TITLE OF INVENTION: PAPILLOMAVIRUS VACCINES				
CC	NUMBER OF SEQUENCES: 2				
CC	CORRESPONDENCE ADDRESS:				
CC	ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS				
CC	STREET: P.O. Box 1404				
CC	CITY: Alexandria				
CC	STATE: Virginia				
CC	COUNTRY: United States				
CC	ZIP: 22313-1404				
CC	COMPUTER READABLE FORM:				
CC	MEDIUM TYPE: Floppy disk				
CC	COMPUTER: IBM PC compatible				
CC	OPERATING SYSTEM: PC-DOS/MS-DOS				
CC	CURRENTWARE: PatentIn Release #1.0, Version #1.30				
CC	CURRENT APPLICATION DATA:				
CC	APPLICATION NUMBER: US/08/724,281				
CC	FILING DATE: 01-OCT-1996				
CC	CLASSIFICATION: 424				
CC	PRIOR APPLICATION DATA:				
CC	APPLICATION NUMBER: US 60/004,691				
CC	FILING DATE: 02-OCT-1995				
CC	ATTORNEY/AGENT INFORMATION:				
CC	NAME: Teskin, Robin L.				
CC	REGISTRATION NUMBER: 35,030				
CC	REFERENCE/DOCKET NUMBER: 010091-015				
CC	TELECOMMUNICATION INFORMATION:				
CC	TELEPHONE: (703) 836-6620				
CC	TELEFAX: (703) 836-2021				
CC	INFORMATION FOR SEQ. ID NO. 1:				
CC	SEQUENCE CHARACTERISTICS:				
CC	LENGTH: 508 amino acids				
CC	TYPE: amino acid				
CC	STRANDEDNESS: single				
CC	TOPOLOGY: linear				
CC	MOLECULE TYPE: protein				
CC	SEQUENCE 508 AA; 57610 MW; 1344522 CN;				
DB	Query Match	53.1%; Score 1974; DB 68; Length 508;			
DB	Best Local Similarity	49.2%; Pred. No. 6,96e-183;			
DB	Matches 249; Conservative 138; Mismatches 108; Indels 11; Gaps 8;				
DB	7 MAVVLPAAQNKRYLPPQPTTRILSTDEYVTRNLTVAHATSEKLLVGHPLFEISSN--QTV 64				
QY	1 MALWLPSPSNITVLLPPPSYARVAVNTDDVYTRTSIFYHAGSSRLTVGNPVRVPPAGGNNKQ 60				
DB	65 TIPKPSPAFVFRVFRFADPRFAFGDKALINPETERLWGLRGIEIGRQPLGIGTGH 124				
QY	61 DIPKSAQVQYVFRQPLDPDKFGPLPDSIYNPEQRLVWACAGVELIGRQPLGVGLSGH 120				
DB	125 PLNLKDAENPTVININTHANGDSRONTAFPAKOTQWFLVGCIPASGEHWT--SRPCGEO 183				
QY	121 PEYNKLDPTES--SAAATSNVSEVDYDNYVDYKOTOLCIGCAPAIEHNAKGTACKSRP 179				
DB	184 VKLGDCPPVQVQVIESTYIEGDMMDIGFGMDPAALQODKSDVPLDVQATCKPYPIRMNH 243				
QY	180 LSGDCPPLELKNLYLEGDWDVYIGAMDSTLDQTKCEVPLDICSICKYPIPYLQMSA 239				
DB	244 EAYGSMFFAFRRDQMTYRHEFTRGSGVGDEKAVQSLYLTADAEPRTTLATNTVVGTPS 303				

Qy	240	DPYGDSDMEFCILRRQQLTFAHHEWNNAGIMGD--TVPPSLIYIKG-IGMAASPGSCYISPS	236
Db	304	GSWVSSDVQLEFNRSYWLRGQGGNNGIGWRNQLFITVGDNTGTSLSI--SMKNNASTTY	361
Qy	297	GSIVTSQDSQLEFNKPYWLHKRAQGHNNNGICWHNQLFVTVVADTRSTNTLTCASSTOSPVGQY	356
Db	362	SNANFNDFLRTTEEFDSLFIYQQLCKVALLPENLAIYITMDPNILEMQSLVSQPTPTPLE	421
Qy	357	DATKFKKSRVAYEYDLOFQITLCTITLTLADVMSYIHSNMSSILEDNFGVPPPTTSLV	416
Db	442	DQYRFLGSLAKQPEQAPPEQDPDYSQKFEWVDLTERMSQLOQFPLGRKFLYOSGM	481
Qy	417	DTYRIV-OSVAITQCKDAPEAKNPYDKLKFNVVDLKEKFSLDLDQYPLGRKFLVQAGL	475
Db	482	TQRTATSTTRKKTIVRSTASARRK	507
Qy	476	-RRKPTIGRRKRSAPSATSTSKPAKR	500
RESULT	7	STANDARD;	PRT;
ID	US-08-724-281-2	503	AA.
XX	xxxxxx		
DT	01-JAN-1900		
DE	Sequence 2, Application US/08724281.		
XX			
CC	Sequence 2, Application US/08724281		
CC	GENERAL INFORMATION:		
CC	APPLICANT: SCHLEGEL, C. Richard		
CC	APPLICANT: JENSON, A. Bennet		
CC	APPLICANT: GHIM, Shin-Je		
CC	TITLE OF INVENTION: PAPILLOMAVIRUS VACCINES		
CC	NUMBER OF SEQUENCES: 2		
CC	CORRESPONDENCE ADDRESS:		
CC	ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS		
CC	STREET: P.O. Box 1404		
CC	CITY: Alexandria		
CC	STATE: Virginia		
CC	COUNTRY: United States		
CC	ZIP: 22313-1404		
CC	COMPUTER READABLE FORM:		
CC	MEDIUM TYPE: Floppy disk		
CC	COMPUTER: IBM PC compatible		
CC	OPERATING SYSTEM: PC-DOS/MS-DOS		
CC	SOFTWARE: Patentin Release #1.0, Version #1.30		
CC	CURRENT APPLICATION DATA:		
CC	APPLICATION NUMBER: US/08/724,281		
CC	FILING DATE: 01-OCT-1996		
CC	CLASSIFICATION: 424		
CC	PRIOR APPLICATION DATA:		
CC	APPLICATION NUMBER: US 60/004,691		
CC	FILING DATE: 02-OCT-1995		
CC	ATTORNEY/AGENT INFORMATION:		
CC	NAME: Teekin, Robin L.		
CC	REGISTRATION NUMBER: 35,030		
CC	REFERENCE/DOCKET NUMBER: 010091-015		
CC	TELECOMMUNICATION INFORMATION:		
CC	TELEPHONE: (703) 836-6620		
CC	TELEFAX: (703) 836-2021		
CC	INFORMATION FOR SEQ ID NO: 2:		
CC	SEQUENCE CHARACTERISTICS:		
CC	LENGTH: 503 amino acids		
CC	TYPE: amino acid		
CC	STRANDEDNESS: single		
CC	TOPOLOGY: linear		
CC	MOLECULE TYPE: protein		
CC	SEQUENCE 503 AA: 57454 MW; 1357036 CN;		
Qy	Query Match	50.1%;	Score 1863; DB 68; Length 503;
	Best Local Similarity	48.3%;	Pred. NO. 1.17e-171;

SO	SEQUENCE	21 AA; 2264 MW; 1895 CN;
	Query Match	3.7%; Score 137; DB 14; Length 21;
	Best Local Similarity 100.0%;	Pred.No. 2.38e-02;
	Matches 21; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
Db	1 QSAVITCCKDAAPAKNDPPYD 21 	
QY	423 QSAVITCCKDAAPAKNDPPYD 443	
RESULT 11	ID US-07-949-836C-67	STANDARD; PRT: 21 AA.
AC xxxxxx		
DT 01-JAN-1900		
XX	Sequence 67, Application US/07949836C.	
DE XX	Sequence 67, Application US/07949836C.	
CC CC	GENERAL INFORMATION:	
CC CC	APPLICANT: DILLNER, JOAKIM	
CC CC	APPLICANT: DILLNER, LENA	
CC CC	TITLE OF INVENTION: SYNTHETIC PEPTIDES OF HUMAN	
CC CC	TITLE OF INVENTION: PAPILLOMAVIRUS 1, 5, 6, 8,	
CC CC	TITLE OF INVENTION: 11, 16, 18, 31, 33 AND 56,	
CC CC	TITLE OF INVENTION: USEFUL IN IMMUNOSSAY FOR	
CC CC	TITLE OF INVENTION: DIAGNOSTIC PURPOSES	
CC CC	NUMBER OF SEQUENCES: 193	
CC CC	CORRESPONDENCE ADDRESSES:	
CC CC	ADDRESSEE: MASON & ASSOCIATES, P.A.	
CC CC	STREET: 17757 U.S. HWY. 19 NORTH, SUITE 500	
CC CC	CITY: CLEARWATER	
CC CC	STATE: FLORIDA	
CC CC	COUNTRY: U.S.A.	
CC CC	COMPUTER READABLE FORM:	
CC CC	MEDIUM TYPE: Floppy disk	
CC CC	COMPUTER: IBM PC compatible	
CC CC	OPERATING SYSTEM: Windows 3.0	
CC CC	SOFTWARE: Microsoft Word 6.0	
CC CC	CURRENT APPLICATION DATA:	
CC CC	APPLICATION NUMBER: US/07/949,836C	
CC CC	FILING DATE:	
CC CC	ATTORNEY/AGENT INFORMATION:	
CC CC	NAME: LOUISE A. FOUTCH	
CC CC	REGISTRATION NUMBER: 37,133	
CC CC	REFERENCE/DOCKET NUMBER: 1946.6	
CC CC	TELECOMMUNICATION INFORMATION:	
CC CC	TELEPHONE: 813-538-3800	
CC CC	TELEFAX: 813-538-3820	
CC CC	TEXT:	
CC CC	INFORMATION FOR SEQ ID NO: 67:	
CC CC	SEQUENCE CHARACTERISTICS:	
CC CC	LENGTH: 21 amino acids	
CC CC	TYPE: amino acid	
CC CC	TOPOLOGY: linear	
CC CC	MOLECULE TYPE: peptide	
SQ	SEQUENCE 21 AA; 2264 MW; 1895 CN;	
	Query Match	3.7%; Score 137; DB 14; Length 21;
	Best Local Similarity 100.0%;	Pred.No. 2.38e-02;
	Matches 21; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
Db	1 QSAVITCCKDAAPAKNDPPYD 21 	
QY	423 QSAVITCCKDAAPAKNDPPYD 443	
RESULT 12	ID US-08-247-485-15	STANDARD; PRT: 22 AA.
XX		

AC xxxxxx
XX 01-JAN-1900
DT
XX
DE Sequence 15, Application US/08247485.
XX
CC Sequence 15, Application US/08247485
CC GENERAL INFORMATION:
CC APPLICANT: Muller, Martin
CC APPLICANT: Chasmod, Lutz
CC TITLE OF INVENTION: SEROREACTIVE EPITOPES OF HUMAN
CC TITLE OF INVENTION: PAPILLOMAVIRUS (HPV) 16 PROTEINS
CC NUMBER OF SEQUENCES: 21
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
CC STREET: 1300 I Street, N.W. Suite 700
CC CITY: Washington
CC STATE: D.C.
CC COUNTRY: USA
CC ZIP: 20005-3315
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/247,485
CC FILING DATE:
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: US 07/671,205
CC FILING DATE: 18-MAR-1991
CC APPLICATION NUMBER: EP 90105222.5
CC FILING DATE: 20-MAR-1990
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Lavin Jr., Lawrence M.
CC REGISTRATION NUMBER: 30,768
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: (202) 408-4000
CC TELEFAX: (202) 408-4400
CC INFORMATION FOR SEQ ID NO: 15:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 22 amino acids
CC TYPE: amino acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: peptide
CC SEQUENCE 22 AA; 2750 MW; 2810 CN;
SQ
Query Match 3.2%; Score 118; DB 40; Length 22;
Best Local Similarity 70.0%; Pred. No. 7.60e-01;
Matches 14; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

CC TITLE OF INVENTION: Papilloma Virus Vaccine
CC NUMBER OF SEQUENCES: 66
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Merchant & Gould
CC STREET: 3100 Northwest Center
CC CITY: Minneapolis
CC STATE: MN
CC COUNTRY: USA
CC ZIP: 55402
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/185,928
CC FILING DATE: 19-JAN-1994
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: WO PCT/AU93/02184
CC FILING DATE: 20-JUL-1992
CC APPLICATION NUMBER: AU PK7322
CC FILING DATE: 19-JUL-1991
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Kowalchuk, Katherine M.
CC REGISTRATION NUMBER: 36,848
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 612-332-5300
CC TELEFAX: 612-332-9081
CC INFORMATION FOR SEQ ID NO: 40:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 15 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC MOLECULE TYPE: peptide
CC SEQUENCE 15 AA; 1898 MW; 1116 CN;
SQ
Query Match 3.1%; Score 117; DB 34; Length 15;
Best Local Similarity 93.3%; Pred. No. 9.08e-01;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1 RHGEYDLPFQLC 15
QY 366 RHVEYDLPFQLC 380

RESULT 14
ID US-08-185-928-34 STANDARD: PRT; 15 AA.
XX
XX xxxxxx
AC
XX
DT 01-JAN-1900
XX
DE Sequence 34, Application US/08185928.
XX
CC Sequence 34, Application US/08185928
CC GENERAL INFORMATION:
CC APPLICANT: Zhou, Jlan
CC APPLICANT: Frazer, Ian
CC TITLE OF INVENTION: Papilloma Virus Vaccine
CC NUMBER OF SEQUENCES: 66
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Merchant & Gould
CC STREET: 3100 Northwest Center
CC CITY: Minneapolis
CC STATE: MN
CC COUNTRY: USA
CC ZIP: 55402
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible

CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/185,928
CC FILING DATE: 19-JAN-1994
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: WO PCT/AU93/02184
CC FILING DATE: 20-JUL-1992
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: AU PK7322
CC FILING DATE: 19-JUL-1991
CC ATTORNEY/AGENT INFORMATION:
CC NAME: Kowalchuk, Katherine M.
CC REGISTRATION NUMBER: 36,848
CC REFERENCE/DOCKET NUMBER: 10174, SUSWO
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 612-332-5300
CC TELEFAX: 612-332-9081
CC INFORMATION FOR SEQ ID NO: 34:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 15 amino acids
CC TYPE: amino acid
CC TOPOLOGY: linear
CC MOLECULE TYPE: peptide
CC SEQUENCE 15 AA: 1886 MW; 1025 CN;
SO

Query Match 3.0%; Score 113; DB 34; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.84e+00;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Db 1 QLFNKPWLQRAQGH 15
QY 305 QLFNKPWLHKAQGH 319

RESULT 15
ID US-08-185-928-13 STANDARD; PRT; 15 AA.
AC xxxxxx
DT 01-JAN-1990
XX
DE Sequence 13, Application US/08185928.
XX
CC Sequence 13, Application US/08185928
CC GENERAL INFORMATION:
CC APPLICANT: Frazer, Ian
CC TITLE OF INVENTION: Papilloma Virus Vaccine
CC NUMBER OF SEQUENCES: 66
CC CORRESPONDENCE ADDRESS:
CC ADDRESSEE: Merchant & Gould
CC STREET: 3100 Norwest Center
CC CITY: Minneapolis
CC STATE: MN
CC COUNTRY: USA
CC ZIP: 55402
CC COMPUTER READABLE FORM:
CC MEDIUM TYPE: Floppy disk
CC COMPUTER: IBM PC compatible
CC OPERATING SYSTEM: PC-DOS/MS-DOS
CC SOFTWARE: Patentin Release #1.0, Version #1.25
CC CURRENT APPLICATION DATA:
CC APPLICATION NUMBER: US/08/185,928
CC FILING DATE: 19-JAN-1994
CC CLASSIFICATION: 435
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: WO PCT/AU93/02184
CC FILING DATE: 20-JUL-1992
CC PRIOR APPLICATION DATA:
CC APPLICATION NUMBER: AU PK7322
CC FILING DATE: 19-JUL-1991

CC ATTORNEY/AGENT INFORMATION:
CC NAME: Kowalchuk, Katherine M.
CC REGISTRATION NUMBER: 36,848
CC REFERENCE/DOCKET NUMBER: 10174, SUSWO
CC TELECOMMUNICATION INFORMATION:
CC TELEPHONE: 612-332-5300
CC TELEFAX: 612-332-9081
CC INFORMATION FOR SEQ ID NO: 13:
CC SEQUENCE CHARACTERISTICS:
CC LENGTH: 15 amino acids
CC TYPE: amino acid
CC STRANDEDNESS: single
CC TOPOLOGY: linear
CC MOLECULE TYPE: peptide
CC SEQUENCE 15 AA: 1673 MW; 1300 CN;
SO

Query Match 3.0%; Score 112; DB 34; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.19e+00;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Db 1 TORLWACGVGEVGR 15
QY 95 TORLWACAGVEIGR 109

Search completed: Tue Sep 23 15:23:36 1997
Job time : 145 secs.

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